

# American Aviation

The Independent Voice of American Aeronautics

DECEMBER 1, 1946

## Airline Safety

**T**HE DOMESTIC AIRLINES of the United States have had their share of unfortunate accidents recently, and every time one of these accidents makes the front pages of the newspapers, the public is inclined to lose sight of a very important fact: the safety record of the domestic airlines for the first 10 and one-half months of 1946 is as good as any year in the history of air transportation.

*Fortnightly Review*

Through November 15, the airlines had flown 82,000,000 passenger-miles per passenger fatality. Or, putting it another way, fatalities had been 1.21 per 100,000,000 passenger-miles flown. For the entire calendar year 1945, these same airlines flew only 46,772,000 passenger-miles per passenger fatality, and they had 2.14 such fatalities per hundred million passenger-miles. These figures do not include the accident at Newfoundland, but neither do they include the millions of passenger-miles operated in international service. The only year that equals the current year in safety was 1939.

The 1946 record to date is remarkable, when it is remembered that the airlines have been undertaking substantial expansion, increasing their fleets, adding four-engined equipment, etc. And the record comes as a surprise to many observers. Probably the reason it comes as a surprise is because few people in the industry or the government have taken the trouble to point it out. Until the Civil Aeronautics Administration issued a release on safety in late November, the public had nothing to tell it how good the record was. The Air Transport Association could well have stepped in many weeks ago and given the public some information.

The Safety Bureau of the Civil Aeronautics Board is making every effort to do its part in improving the safety of both scheduled and non-scheduled operations. In announcing recent meetings with the airline industry, though, it might have been well for the Board to have given credit where credit is due and pointed to the already-good record, instead of leaving the impression that drastic action was necessary. This, however, may be beside the point. The Safety Bureau has met with industry officials and has made 20 recommendations for improving operations. Similar meetings are to be held with representatives of the Air Line Pilots Association. There is said to be general agreement in industry circles that the recommendations are reasonable and should be put into effect. The pilots' attitude is not yet known.

(Turn to page 6)



## Communications Pioneer

J. R. "Russ" Cunningham, for the past 12 years director of communications for United Air Lines and one of the pioneers in aeronautical communications research and development, celebrates on Dec. 1 the completion of 20 years in the air transport industry. Cunningham joined Pacific Air Transport, which later became part of United, on Dec. 1, 1926 as a pilot. He is an officer and director of Aeronautical Radio, Inc.

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THE NEWS MAGAZINE OF COMMERCIAL AVIATION

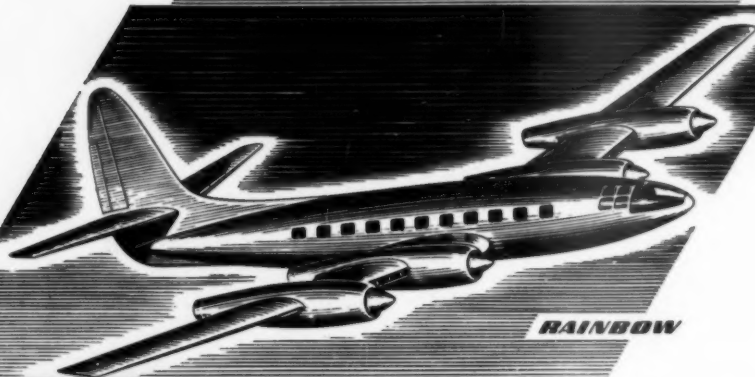
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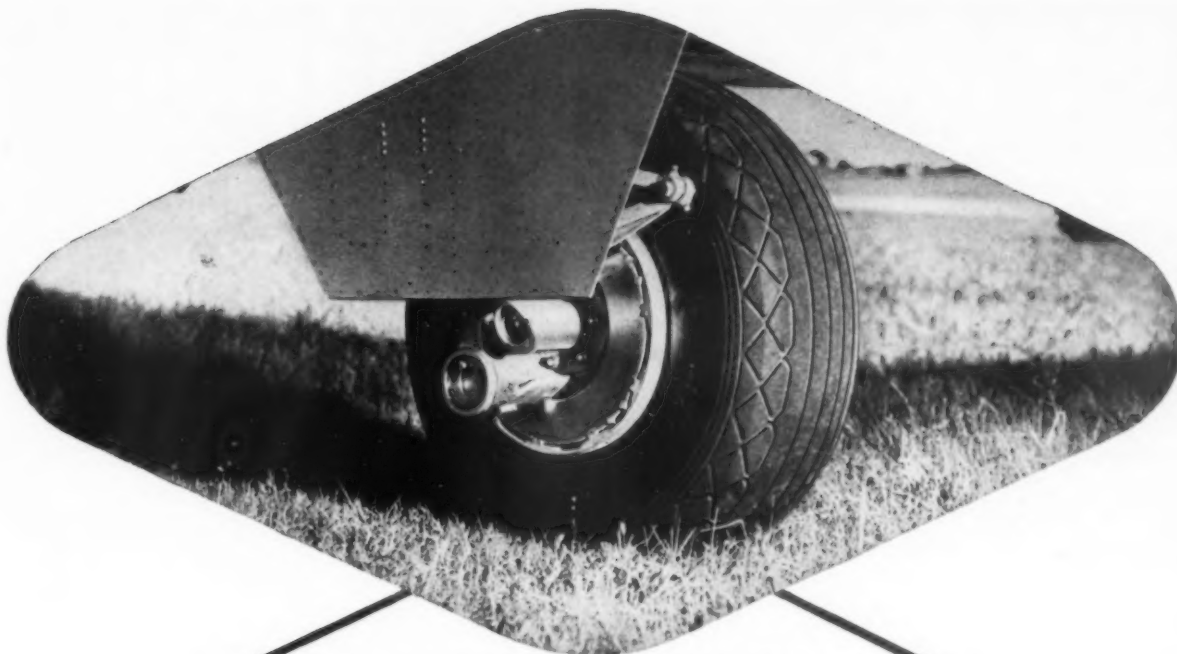
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# American Aviation

Volume 10 Number 13

The Independent Voice of American Aeronautics

DECEMBER 1, 1946



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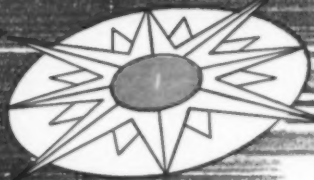
**American Aviation Traffic Guide:** Monthly publication of airline schedules, rates and regulations for passengers and cargo transportation by commercial air transport. Supplements furnished subscribers covering changes occurring between issues. Subscriptions: U. S. and Latin America \$7.50 one year (12 issues and supplements); Canada \$8.00. All other countries \$9.00. Published and revised from editorial offices at 139 North Clark Street, Chicago 2, Illinois. (Telephone: State 2154). H. D. WHITNEY, Managing Editor.

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# Editorial

(Continued from Page 1)

The Safety Bureau is to be commended for its vigilance and initiative.

The airlines always have and always will stress safety first. But the present discussions in both government and industry on safety should not be looked upon as anything unusual. Instead, they are efforts to make an already-good record better.

## The ACC and Industry

**T**HE AIR COORDINATING COMMITTEE is a group with which everyone in aviation should have at least a passing knowledge. Although there had been an "unofficial" ACC since early 1945, it was not until several weeks ago that President Truman gave the group a new and more important status under an executive order.

This new ACC is a top policy body, consisting of representatives of the Army, Navy, Commerce, State and Post Office Departments, the Civil Aeronautics Board, and the Bureau of the Budget, the latter in a non-voting capacity. It is going to be concerning itself with many important policy matters in both international and domestic aviation, and for this reason it becomes of importance to everyone.

It is hoped that the aviation industry will be consulted on matters being considered by the Committee. It is good news that the Committee has named an Aviation Industry Panel, on which are representatives of the Air Transport Association, Aircraft Industries Association, National Aeronautic Association, Institute of the Aeronautical Sciences, American Federation of Labor and the CIO. These groups should be in on early policy discussions affecting their fields. They should not be brought into the picture only after a policy has been decided.

At the present time this is particularly true of international air transport. ACC has already announced that it is working to formulate U. S. views on a multilateral air transport agreement, which is scheduled to come up for consideration at the assembly meeting of the Provisional International Civil Aviation Organization in Montreal next May.

What consideration of this multilateral agreement means, in simple language, is that the nations of the world will attempt to agree that they should operate international air services under the same economic rules. And our government and our international airline operators should make certain that their views coincide on what the U. S. believes the rules should be. Too often in the past, with industry brought into discussions too late, there have been differences of opinion. Foreign nations have always brought to international aviation meetings representatives of their nationally-owned airlines as official delegates. The least the U. S. can do is to allow the industry to participate in formulation of policies. Ostensibly this is why the panel was named, but ACC must be sure to recognize its worth and use it to the fullest degree.

And on another subject, the old, unofficial ACC, uncertain of its status, operated behind an iron curtain of

secrecy. However, it should now give serious consideration to the question of keeping the public informed of its activities. So far it has done a good job, and it should continue to follow this policy. Both the Committee and the public will benefit.

ERIC BRAMLEY

## The National Aircraft Show

**T**HE AVIATION INDUSTRY has just finished putting on a big show, for the public and for itself, in Cleveland. For the public—at least for that part of the public which saw it—it was a first-rate show. For the industry, its success can be debated according to what it was expected to accomplish.

An exhibitor at a show like this has to charge it off against (1) direct and indirect sales to the public or the industry, (2) long-range advertising of name and product, or (3) even longer-range cooperation with the industry, and with the military, to sell aviation to the public. According to their various purposes and expectations, some exhibitors at Cleveland thought the National Aircraft Show was a success, and others thought it was something of a failure. For any purpose and any expectation it hardly can be denied that a better time and a better place could have been found for the industry's biggest promotional effort. Late autumn is no time to interest people in taking to the air, and Cleveland, even if it had not already seen a couple of big aviation exhibitions this year, hardly seems the best place to draw people from all over the country.

Sponsors of the show are now debating next year's program. They have requests from several cities (Los Angeles has not been one of them) for a big aviation show in 1947. Before they can decide on any of them, they must make sure that major exhibitors are willing, on the basis of what happened at Cleveland, to finance a similar proposition next spring or any time next year. A lot of the exhibitors at Cleveland seemed to think that public attendance was mediocre, that industry attendance was composed of too many sellers and not enough buyers, and that nation-wide publicity was not worth the price of putting on the show.

Support for a similar display next year is not likely to be universal. It may be necessary to consider a different means of reaching the public and of bringing the industry together. Quite a few people would like to try something like a National Aviation Week, held in the early part of the year when people are looking forward to good flying weather, and promoted in a manner which would not confine the industry's expenditure so much to one community. As for the show part of it, there was talk at Cleveland of trying to emulate the automobile people with all manufacturers showing new products simultaneously and using nation-wide dealer tie-ups for a local splash.

Whatever may be done in the future, it certainly should be done to reach more people than saw or read about the Cleveland show.

D. S.

AMERICAN AVIATION

# An Answer to Airline Critics

## Travel to and through the South is easier, faster than ever before

**H**ERE are the facts about travel today on Delta. They are printed here because several recent articles have confused many travelers and started rumors about lack of space, traffic jams and quality of service.

The airlines handled a tremendous wartime load with less than half their pre-war equipment. That's changed now. Delta, for example, has six times as many planes as during the war and nearly eight times as many seats.

This expansion, and return to normal service, was carried out during a difficult time of national reconversion, strikes and shortages. But while most costs were rising, Delta added more planes and reduced fares 10 per cent.

Automobile output has slumped. The nation lacks soap, sugar, housing and a lot of things. *But on Delta we do have ample equipment, frequent schedules, and plenty of seats at this time.*

Now, answering those stories about airlines:

**TRAFFIC:** The writers stressed flight delays and traffic jams, due to weather, pointing to the world's busiest terminal for domestic and foreign flights. No other terminal has a problem as acute, but use of nearby airports will give immediate relief. At all major terminals, new navigational aids and improved operational procedures will expedite traffic.

Delta operates mainly in the South, and has the advantage of many airports greatly improved and enlarged during the war.

**RESERVATIONS:** Delta has added

phones as fast as they were available. New personnel has been trained to handle your travel problems. Priorities have long since vanished. The wartime rush is over. Redistribution of military personnel and their dependents is largely completed. Now it's business and pleasure travel again, and space is confirmed on a "first come, first served" basis. Some flights are more popular than others, but you now have a wider choice of alternate flights.

**DEPENDABILITY:** In September, Delta completed 99.02 per cent of scheduled mileage. Delta recently received a special citation from the National Safety Council for ten years of operation without a fatality.

**COSTS:** Air travel is about five times as fast as first class surface means, yet the cost is often less, regardless of the value of time saved. Via Delta, you can make many one-day business trips that would take two nights and a day by other means. By air you go and return the same day, and spend both nights at home. There's no extra fare on our larger planes or non-stop flights.

**CHILDREN:** Delta carries children up to 12 years at half-fare, while youngsters under two ride free. Parents tell us that flying largely eliminates problems of traveling with children.

**SERVICE:** Obviously, the change from war to peace-time operation was not as smooth and efficient as we would have liked. No transportation system can call itself perfect. We do feel, however, that Delta service

has reached a new high. Larger planes provide more room and comfort, as well as greater speed. You'll find improved flight services and finer meals. Ticketing has been simplified and speeded up. There are more employees now to serve you. Some years ago, we had one employee for each seat aloft. Now, we average  $3\frac{3}{4}$  employees for each seat in the air. Making passengers feel at home is a matter of pride to Delta people, to whom traditional "Southern hospitality" is no empty phrase.

**EQUIPMENT:** Delta now operates world-famous 21-passenger DC-3's and larger, luxurious 44-passenger DC-4's, and new summer will add 36-passenger Martin 2-0-2's. For maximum passenger comfort, our DC-4's fly with only 44 seats in space for 60. There's ample room for you to relax, stretch or even stroll about.

Frankly, we feel that recent airline criticism has placed undue emphasis on *relatively* infrequent incidents. Air travel is today more than ever the fastest, cleanest and most comfortable form of transportation. Our constant objective is to provide at a reasonable cost the speediest and most luxurious service possible—operated on dependable schedules with utmost safety. Delta welcomes an opportunity to demonstrate these facts.

November 3, 1946



C. E. WOOLMAN, President

General Offices, Atlanta, Ga.



This advertisement, originally published in Delta route city newspapers, has received such widespread comment that it is reproduced here for the benefit of the air transport industry.



## Wings of Yesterday

### 25 Years Ago

Helium was used successfully in first practical test, in C-7 Navy blimp over Norfolk, Va. (Dec. 1, 1921)

U. S. Circuit Court of Appeals reversed U. S. District Court and held that Glenn H. Curtiss was the first person to invent and operate a hydroairplane or flying boat. The decision was final. (Dec. 15, 1921).

### 15 Years Ago

Lowell R. Bayles established American speed record of 281.75 mph at Detroit, Mich. He flew a Granville Gee Bee Sportster equipped with a Pratt and Whitney Wasp motor. (Dec. 1, 1931)

The Herbert Schiff Trophy was awarded to U. S. Naval Reserve Aviation Base, Floyd Bennett Field, Brooklyn, N. Y. (Dec. 10, 1931).

## Letters

### Housing Problem

To the Editor:

Can't pass up this opportunity to rib you. On Page 16 of your November 15 issue is a headline, "IATA Group O. K.'s World-Wide Cleaning House for Airlines." This should have been clearing house. Tsk tsk.

A Subscriber.

(American Aviation's red-faced editors caught the typographical error before the issue went to press, marked it for correction. The printers, however, were determined that the airlines were going to have a cleaning house, come what may, and the mistake went uncorrected. The tsk tsk has been passed on to the printers—Ed. Note.)

### Motive Suspected

To the Editor:

With regard to CAB Safety Bureau Director W. S. Dawson's 20 ideas for the improvement of airline operation procedure (American Aviation, Nov. 1), I wish to protest his proposal No. 2, "requiring supervisory dispatchers to have airline piloting experience."

My protestation is based on the following:

1) I question the relevancy of the director of the CAB Safety Bureau making such a proposal. It has never been demonstrated that the safety of airline operation is related to whether an airline dispatcher is or is not an ex-airline pilot.

2) It is not necessarily true that the best airline pilot would make a good or even fair airline dispatcher, or vice versa.

3) Such a regulation as Mr. Dawson proposes would mean that an outstanding majority of those men who have made and are now making careers in airline dispatching would be prohibited from attaining a supervisory position in their field of endeavor, and that the airline industry as a whole would be deprived of the wealth of knowledge and experience that men with such a background would bring to those positions.

4) Such a regulation would keep enterprising young men from joining the dispatch departments of the airlines. The knowledge that the law would prevent further advancement at the period of their greatest ability and experience would lead all capable young men to seek other professions.

5) Such a suggestion is no more logical than if one suggested that all chief pilots be required to have airline dispatching experience.

It is apparent, without much study, why Mr. Dawson, an ex-airline pilot himself, would make such a suggestion. I will not be too surprised if he proposes that all airline supervisory positions be reserved for grounded pilots. Of course, this suggestion has nothing to do with the safety of airline operations but it does assure (1) that grounded airline pilots would be assured of good jobs, (2) that almost all present airline dispatchers would be denied promotion and could consider their careers halted.

In short, I regret to say that I doubt Mr. Dawson's good faith.

(NAME WITHHELD BY REQUEST.)

## Obituary

### Dr. Sanford A. Moss

Dr. Sanford A. Moss, 74, General Electric consulting engineer, known for his work on aircraft superchargers and gas turbines, died at his home in Lynn, Mass., on Nov. 10. Dr. Moss received the 1940 Collier Aviation Trophy jointly with the Army Air Forces for "outstanding success in high altitude flying by the development of the turbosupercharger." The Institute of Aeronautical Sciences also awarded him the Sylvanus Albert Reed Award for his supercharger work in 1944.

### Edward O. Ireland

Edward O. Ireland, cargo traffic manager for TWA, died Nov. 17 at his home in Kansas City. He joined TWA Nov. 1, 1943, as cargo traffic representative in New York, and last year was promoted to system manager. As chairman of Air Cargo, Inc., he had been developing coordinated interline cargo activities for the industry.

## Books

**AIRPORTS: Design, Construction & Management.** By Horace K. Glidden, Hervey F. Law, John E. Cowles. 583 pp. plus figures and charts. \$7.00. McGraw-Hill Book Co., New York.

The authors of this new airport book have very satisfactorily undertaken to gather together, from their own extensive experience and from all sources at their disposal, a detailed guide for airport planners, designers, builders and operators. Starting with a description of government participation in airport programs, it continues into site selection, soil analysis, grading, drainage, surfacing, improvements and equipment installations, and management and operation. The last half of the book is devoted to special appendices on engineering considerations of design and construction. Although basically an engineer's book, it is planned to give a broad understanding of all airport considerations to specialists in particular subjects.

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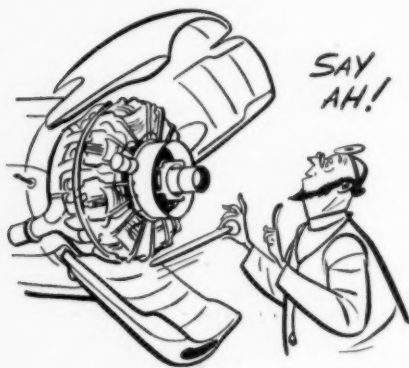
# HANGAR FLYING



## THE MECHANICAL MOUTH

It used to be like pulling teeth to get under an engine cowl. After a quarter-hour of yanking on rows of fasteners, you took down a truckload of Dural shingles. If you didn't lose or mash any under foot while you worked on the engine, you were plain lucky.

Now it's as simple as lifting the hood on the family bus. Lockheed engineers have worked out a new mechanical mouth for *Constellation* engines that opens up in two minutes flat. Unclasp and lift two small side panels, pull away the one-piece upper and lower hoods, and the engine's as bare as the tonsils of a six-year old saying "Ah!"



The giant metal jaws stay open obligingly, and completely out of the way. Prying engine medics get plenty of elbow room and save precious minutes on routine inspections. And the mechanical mouth shuts just as fast. Out at Lockheed, the story goes, they took turns saying "Jack Robinson" in timing it.

Everybody that sees the mechanical mouth says it's just common sense. And it's this kind of common sense that gets all the green lights at Lockheed and keeps refinements in step with aviation progress.

**L to L for L**

© 1946, Lockheed Aircraft Corporation, Burbank, California

## Background

(Significant Developments and Forecasts)

**CAA Court Action Threatened:** Even before Civil Aeronautics Administration announced that it has no intention of changing the controversial formula for federal aid funds to the larger airports, the U. S. Conference of Mayors served notice of a fight to the finish. Said the Conference: "If the CAA persists in final promulgation of some of the provisions now incorporated in the preliminary draft, court action will be initiated by the cities to test their validity. It is contended that some of the sections are completely at variance with the Act itself."

**Lockheed in Europe:** R. H. Askew, export sales manager of Lockheed Aircraft Corp., now is in Europe, but whether he will appoint a senior representative to succeed Sol W. Voorhes, whose contract recently was cancelled in a general reorganization and curtailment move, before his return is uncertain. A. F. E. McInerny, who has been a European representative of Lockheed for several years, now is in the U. S. visiting the Burbank factory.

**Advertising in Route Battles:** Pan American Airways has long been an exponent of the advertising technique in presenting its cause to the public. It used this technique especially (but unsuccessfully) when it was seeking a route to Paris—a request which was denied by CAB for the third time on Nov. 21. It used it again for a buildup just before the opening of CAB hearings on its domestic route applications in Atlantic City. The domestic airlines forced Pan Am to reveal on the record that it had spent \$210,337.05 for advertising in connection with its proposed domestic routes during the past three months in 76 newspapers and nine magazines.

Pan Am turned the tables neatly, however, with an elaborate exhibit of ads published during the past year by other major airlines featuring their international service and connections. Said Pan Am: "The principle that air carriers should not be halted at our international boundaries and the advantages of through service between interior points in the U. S. and points abroad have been stressed in the advertising of the very domestic airlines which are asserting in this proceeding that Pan American should be held off at the borders."

**Future Aircraft Shows:** Enough exhibitors were disappointed in the National Aircraft Show just ended in Cleveland that it may be a hard job to get them together for another one. The east coast and west coast idea seems pretty definitely out for next year. Show officials not only have been unable to find a site in the Los Angeles area for next spring; they haven't found Los Angeles particularly interested in having the show. Furthermore, some of the major backers of the Cleveland display have indicated they didn't like it well enough to invest in another one right away.

**Pacific Sleeper Service:** Pan American Airways is determined to get sleeper service on the run to Honolulu established ahead of United Air Lines. To this end it is having 10 of its C-54's now undergoing conversion at the Douglas Aircraft Co. made into sleepers with 22 berths. They are the first DC-4 type ships to be converted into sleepers.

**Convair 240 on Schedule:** If everything goes well, Consolidated Vultee will begin delivering its Model 240 transports on schedule, or a little ahead. Two planes are well along on the production line and work has started on the third. Flight tests are expected before the end of the year.

**North American Needs Space:** North American Aviation is negotiating with Douglas Aircraft Co. for possible use of part of the space at the Douglas Long Beach plant. Douglas recently purchased seven of the buildings in the big plant it operated at Long Beach during the war. With two jet fighters, two trainers, a jet bomber and the Navion on the production schedule, North American's need of additional space is urgent.

**Martin Gets South American Market:** The Glenn L. Martin Co. has moved successfully into the Latin American medium transport market. So far it is the only U. S. manufacturer which has announced sales of postwar commercial transport planes in South America. Orders for 2-0-2's include 10 for Cruzeiro do Sul of Brazil; four for the Doderro interests of Argentina; five or Compania Aeroposta Argentina; and four for Linea Aerea Nacional of Chile. The government-owned Chilean line and Cruzeiro do Sul agreed in 1945 to give each other mutual and reciprocal technical and commercial assistance. Thus, with both using Martins, exchange of engines, spare parts, etc. will be possible in emergencies, thus strengthening the Martin leadership in that region.

**The Lightplane Market Drops:** The sizeable slump in the personal plane market was not unexpected. Now that it is here nobody agrees exactly on what caused it, how long it will last, or what volume of sales eventually will emerge from the decline. The demand from G. I. schools for trainers has been pretty well filled and the advent of cold weather contributed to the sudden drop. So, also, did the rising cost of living.

The fortnight's developments included: Luscombe Airplane Corp., which recently cut the price of its Silvares \$200, laid off 400 employees at Dallas. Engineering & Research Corp. closed down its Ercoupe plant at Riverdale, Md., completely for 90 days with a yard full of planes. Taylorcraft Aviation Corp. was preparing for a court hearing in January for reorganization under bankruptcy. Globe Aircraft Co. at Ft. Worth was reported needing financial assistance. Other manufacturers were feeling the pinch.

William T. Piper, the Cub maker, issued a statement declaring that the lightplane market was far from being exhausted. He said orders for family type three- and four-place planes are still coming in in quantity. Greater utility for practical transportation, plus increasing landing and ground facilities, will bring eventually "unprecedented demands," he firmly believes.

**First Stratocruiser in June:** Delivery of the first Boeing Stratocruiser to Pan American is now expected next June. During July four more will be delivered, according to present indications. Northwest Airlines is next on the list and should get its first Stratocruiser in August.

**Young to Speak Out:** Look for CAB Member Clarence Young to come out with some forthright opinions soon on the basic philosophy of CAB's work. Although renominated for the six-year term, Young has not made up his mind just how long he will remain on the board, but no change is imminent.

**Mediation in the Mill:** Overshadowed by the long TWA strike was the fact that American Airlines has pending a new basic contract involving flight pay and working conditions for its pilots of twin-engined planes. Mediation was resumed in New York, Nov. 26, after being delayed by the urgency of the TWA situation. No strike threats are involved at this time but important wage patterns are expected to be set.

**International Air Parcel Post:** The Post Office Department is doing a lot of thinking about establishing an international air parcel post system, and because this can be done without legislation such a system may be put into operation in the not too distant future. Air parcel post going overseas would be handled on a "deferred" basis to keep planes full, according to Post Office plans, and airlines would receive smaller ton-mile pay for carrying this class of traffic than they receive for air mail. Also being considered is a proposal to make bulk air shipments of newspapers to foreign points. Postmasters at these points would then distribute the newspapers to subscribers by surface means.

The four concrete runway slabs in Moisant International Airport are 150-ft. wide. One runway is 7,000 ft. long, the others each 5,000 ft. long.

(Photo courtesy Douglas O. Langstaff, Director of Aviation for city of New Orleans.)



## Concrete Runways for Safe and Economical Airline Operations

With the heart of the airport—four portland cement concrete runways—completed, New Orleans, La. has announced the opening of its Moisant International Airport for commercial operations. Administration building and hangars are still to be built.

Concrete airport runways such as these usually cost less to build than any other pavement of equal load-carrying capacity. When correctly designed they provide ample strength, are economical to maintain and give years of safe, uninterrupted all-weather operation without costly rebuilding.

The low first cost of concrete, its low maintenance expense and long service life—give low annual cost—the true measure of airport pavement economy.

And besides economic superiority, concrete runways have these added advantages:

- High visibility day or night
- Low crown for rapid drainage
- High skid resistance
- No loose particles to damage planes

Our technical staff will gladly assist engineers in determining the most economical concrete pavement design for any condition of load or service.

**PORTLAND CEMENT ASSOCIATION**  
Dept. 12-65, 33 W. Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of concrete  
... through scientific research and engineering field work

# Built for Business

**Beechcraft** *Bonanza*

- 4 comfortable seats
- Sound-proofed, heated and ventilated cabin; muffled engine
- 175 mph cruising speed; 750 mile range at 165 mph
- Fully equipped: nothing else to buy
- Operating cost: as low as 1¢ per passenger mile

Beech built the Bonanza for business—built it to a business formula; ample payload, high speed, low operating cost, maximum safety. To do it, Beech had to accomplish with 165 horsepower what no other plane had ever done with less than 330! The Bonanza is thus a triumph of aeronautical design and engineering whose purpose is to make available to commerce and industry a new range of benefits from air transportation.

The Bonanza provides both the small business and professional man as well as the large corporation with high-speed, cross-country mobility that can save thousands of man-hours annually, expedite production and sales, facilitate customer services, and chalk up substantial savings in transportation costs. The Bonanza goes when you want to go, where you want to go. It can speed executives and personnel on recreational morale-building week-ends and holidays as well as on business trips. It is a husky, rugged ship—superbly comfortable, easy to fly, economical to operate. *It's built for business!*



## Basic *Bonanza* Performance

• Beechcraft distributors are prepared with facts and figures to help you evaluate the contribution which the new Bonanza can make to your business or profession. Production for 1946 and early 1947 is already sold. Orders for delivery will be filled in the sequence received. Write for full information or see your Beechcraft distributor—and the new Bonanza—now! Beech Aircraft Corporation, Wichita, Kansas, U.S.A.

**There's nothing more to buy**



**...Just step in and fly!**



## Airlines Divided on Need for Higher Fares

**Some Believe Increased Tariffs Required to Offset Recent Slump in Revenues; Others Advocate Cost-Cutting First**

By ERIC BRAMLEY

The domestic airlines, faced with a drop in traffic demand and a resultant decrease in revenues, as well as with soaring costs, have been taking a long look at the possibility of increasing passenger fares, but as yet there is no unanimity of opinion in the industry on what, if anything, should be done.

AN AMERICAN AVIATION survey shows that quite a few airline officials believe that fares must be increased. But there are also a number that have not yet made up their minds, and others who, although not favoring hasty action, leave the door open for a future increase.

The survey left little doubt that fares and mail pay are hot subjects today. There are those in the industry who, although they do not want to be quoted, believe that the time has come to overhaul the whole fare structure and put it, as they say, on a "sane and scientific" basis.

They claim that it isn't on this basis now, and that the cut in fares last year from 5.14c to 4.5c per mile was far from scientific. There are others who believe that the airlines must put their own houses in order, and must try to cut costs before considering increased tariffs.

### Three Schools of Thought

Airline executives contacted fell into three groups: (1) those favoring an increase (2) those not planning an increase, and (3) those still studying the situation.

Among those in the first group was TWA President Jack Frye, who asserted that fares "should never have been lowered." The airlines, Frye pointed out, now need more revenue, and they must get it either from increased passenger fares or increased mail revenue. A raise in passenger fares might have some adverse effect on traffic, but nevertheless it would be better to get these fares "back where they belong," he said.

C. E. Woolman, president of Delta Air Lines, stated that "in view of current and foreseeable increases in material and labor costs which cannot be wholly offset by economies without ultimate impairment of service, I believe industry-wide reestablishment of 5c fares, provide the 10% roundtrip discount is reestablished, would be indeed desirable for the industry."

### Rising Costs, Low Earnings

Leo H. Dwerlkotte, executive vice

president of Western Air Lines, said that the rising cost trend and low earnings of the airlines make necessary "an increase in passenger fares of about 10%."

G. T. Baker, president of National Airlines, took the position that "passenger fares could be increased to 5½c per mile immediately because of rising costs which are still increasing. It takes 10 men to do the work that five men did before the war."

C. Bedell Monro, president of Pennsylvania-Central Airlines, said it is PCA's position "that the present domestic airline rate basis is entirely unrealistic as related to current operating costs and trends. A revised rate basis properly related to such operating costs under sound and efficient management is imperative under the present route structure of domestic air carriers."

"Such rate increase is, in our opinion, a temporary measure necessitated by existent conditions. From a long range viewpoint the ultimate and proper objective is the lowering of fares. This can only be brought about through the adjustment of existing route patterns and correction of equipment handicaps which in the future can result in an overall economically sound air transportation system."

### No Increase for American

In the group planning no increase is C. R. Smith, chairman of the board of American Airlines, and long an advocate of lower fares. "American Airlines has no intention at the present time of either increasing or decreasing fares," Smith said.

Paul F. Collins, president of Northeast Airlines, feared that "increased fares at this time would accelerate steadily diminishing load factors," while J. W. Miller, president of Mid-Continent Airlines, answered that MCA has "made no plans for increasing fares."

Favoring a house-cleaning was W. A. Patterson, president of United Air Lines, who said, "Our policy is that our management must correct those inefficiencies existing and within our control before we can properly decide the necessity for any fare increase at this time."

"Increased fares may be justified but we feel it is the responsibility of our management to take what action remains within its power to correct inefficiencies before making a final decision regarding the action or the amounts involved."

"Any fare increase that penalizes the public for our own inefficiencies would only result in placing a premium on poor management and furthermore result in today's inefficiencies becoming an accepted standard of the future. We hope to be in a position to better judge the situation within the next 60 days."

### Mail Increase Also Contemplated

Robert F. Six, president of Continental Air Lines, asserted that "Continental has been studying for some time the possibility of a small passenger fare increase, and also the possibility of a mail rate increase. Decision will be reached on this in the next two weeks."

Charles E. Beard, vice president of Braniff Airways, said that "the rate subject is and has been under study. No conclusions have been reached yet."

Discussions by those on both sides of the fence—or on the fence—are expected to continue for some time yet. The Civil Aeronautics Board, it is learned, has not gone into the question of passenger fares.

## Some Airlines Start Personnel Cutbacks

Several of the airlines had cut personnel from their payrolls during the past two weeks, while others were planning cuts in the near future. However, some of the larger companies said they would retain their present staffs.

Among reasons given for the lay-offs were decreasing traffic, over-expansion, and the installation of new and improved operating practices, requiring less personnel.

Jack Frye, president of TWA, told AMERICAN AVIATION that TWA may drop 30% of its 16,000 employees. As a result of the recent pilots' strike, TWA has canceled part of its equipment purchase and expansion program, and this, together with completion of conversion work, will require less personnel, he pointed out.

Pennsylvania-Central Airlines is laying off between 800 and 1,000, with the largest number of dismissals being in reservations, where the company will try out a new system proposed by Fred Klein, Detroit district general manager. This system is said to require substantially less personnel. In general, PCA, which had a rapid expansion from 1,800 employees to 5,000, is "taking inventory," officials said.

Pan American Airways announced that

several hundred employees of its Atlantic Division would be laid off Nov. 30. Reason given was that the company now felt, after a year of landplane operations, that it could carry out these operations with fewer personnel.

Colonial Airlines was reported to have let a few employees go, but the retrenchment was described as minor.

Continental Air Lines quietly, and without publicity, lopped off 130,000 miles of service per month and released about 120 employees, 12% of total personnel. "This was done in view of our estimates of a sharp traffic decline this winter, plus increased costs," said President Robert F. Six.

Western Air Lines reported that with decreased traffic and curtailed winter schedules, it is currently laying off personnel which will reach 10 to 15% of total.

National Airlines is making personnel cuts, as is Northeast Airlines, which has reduced 10%. Mid-Continent Airlines said that no cuts have been made, but warned that they may come if revenues continue to decline.

"Delta Air Lines is making no percentage-wise reduction in numbers, but has substantially increased wages looking to higher efficiency from better personnel and to the elimination of inefficient personnel," said President C. E. Woolman.

American Airlines officials said that no reductions were planned, while United stated that "no drastic layoff of employees is under way or contemplated." Eastern Air Lines, with its big winter business under way, was not expected to cut.

## Arbitration Board Gets Job of Settling TWA Pilot Strike Issues

Issues which resulted in a 25-day strike of TWA pilots, the grounding of more than 100 planes, cessation of flying over the carrier's 28,000 miles of domestic and international routes, and furloughing of 15,000 employees are to be resolved by an arbitration board which is to meet in Chicago Dec. 18.

The strike was called off at 5 o'clock in the morning of Nov. 15 and a little more than 24 hours later, TWA resumed limited flight operations. It expected to have all schedules in operation again, both domestic and international, about Dec. 1.

TWA officials estimated that the strike had cost all flight personnel \$850,000 in loss of income, the 15,000 furloughed employees \$2,650,000 in loss of wages and the company a \$7,000,000 loss in gross revenues. The company's loss did not include such items as overhead, depreciation, insurance and taxes. In an attempt to recoup a portion of these losses, TWA said it would reduce its payroll about 30% by not hiring back all of its employees.

The arbitration board consists of George A. Spater, TWA counsel, who will represent the carrier, Robert N. Buck, of Kansas City, who will represent the pilots, and Frank M. Swacker, New York attorney, who will serve as the neutral member. Swacker was appointed by the National Mediation Board when Spater

### Blizzard Hits CAL for Loss

The five day blizzard and snow storm which began Nov. 2 and raged throughout six western and Rocky Mountain states, required the cancellation of over 62% of the scheduled mileage of Continental Air Lines—believed by the company to be the longest continuous period of disrupted air service in the history of domestic operation.

Company President Robert F. Six estimated Continental's loss due to cancellations at over \$70,000.

The airline's operations were said to have been further delayed by failure of the city of Denver to provide adequate equipment and manpower for clearing the runways of Stapleton Air Field after the storm abated. This resulted in closing of the airport at Denver for two days after the storm, with subsequent cancellation of all flights serving the city.

and Buck were unable to agree on the third member.

Determination of the pay of pilots and co-pilots on four-engine equipment in both domestic and international operations will be the principal task facing the arbitration board.

### Arbitration Give Board Choice

The arbitration agreement, however, gives the board discretion as to whether the pay will be on a straight salary basis or whether it will follow the old formula in Decision 83 which includes base pay, hours aloft and miles flown. In addition, the board, if it decides on the formula basis, will decide whether there shall be a minimum salary for first pilots in international service.

Other questions to be decided by the board involve flight time limitation, additional compensation for pilots who also qualify as navigators, school and training pay, moving expenses, insurance, workman's compensation and vacations, changes in the bidding for routes, final settlement of grievance cases now pending as a result of war contract operations, and the commencement date of the award. The award, under the terms of the arbitration agreement, is to remain in effect for one year after Jan. 31, 1947.

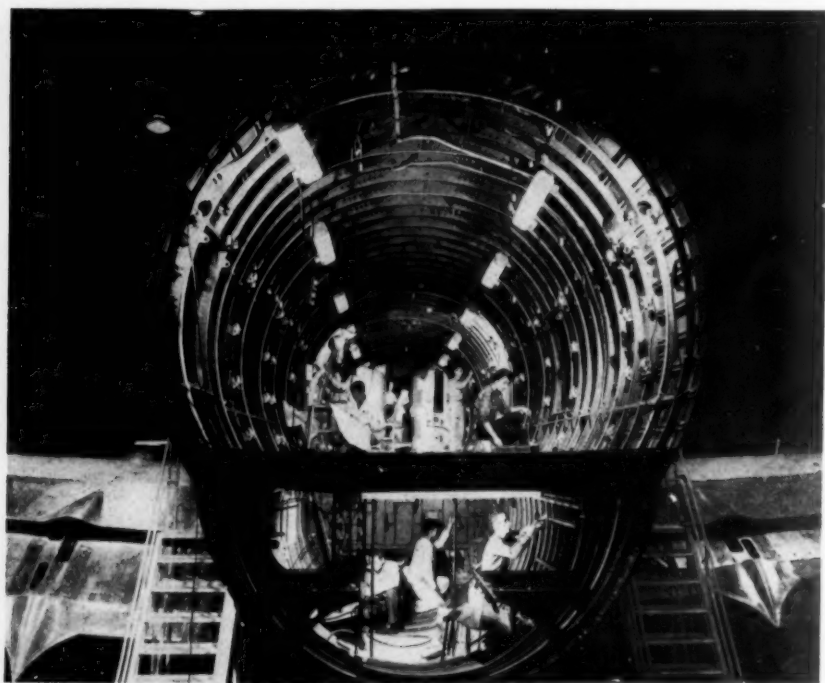
The award of the arbitration board is final. Under the terms of the arbitration agreement, the award must be made within 19 days from the commencement of the hearing.

## George Resigns from Army To Head Peruvian Airline

Lt. Gen. Harold L. George, commanding general of the Air Transport Command during the war, has resigned from the Army to become president and chairman of the board of Peruvian International Airways, a Peruvian-flag carrier recently organized by C. M. Keys with American and Peruvian associates.

The airline has been authorized by the Peruvian government to operate scheduled passenger and cargo services on a route from Lima to Montreal, via Panama, Havana, and New York.

Gen. George, who completed 30 years of military service, is one of the pioneers of military aviation. As head of the airline, he will establish offices and residence in Lima, Peru.



**Stratocruiser Construction**—Construction in the form of riveting, wiring, and measuring takes place in a yet unfinished Stratocruiser, deluxe 80-passenger transport designed and being built by Boeing. The Army transport version of the plane, the C-97, will be fixed to accommodate troops and heavy equipment for long range flights.

## CAA Sticks to Sliding Scale for Allocating Federal Airport Funds; Outlines Timetable

The Civil Aeronautics Administration proposes to stick to its controversial sliding scale formula for determining the federal share in the cost of large airport projects under the Federal Airport Act. Charles B. Donaldson, CAA assistant administrator for airports, told the American Municipal Association in Chicago, Nov. 20.

The formula, which would reduce the federal share below 50% on projects costing more than \$2,000,000, had been under heavy attack, especially by large airport interests, during recent hearings on proposed airports rules in Washington late in October. (*American Aviation*, Nov. 15).

Donaldson declared that the formula would not be changed fundamentally because "we believe Congress clearly indicated its intent when it wrote in the enabling legislation that the federal government will pay 50% of the cost of Class 1, 2 and 3 airports, and may pay up to 50% of the cost of larger fields. Good administration dictated the development of a formula as an impartial method of determining just what the federal share in the cost of large fields should be.

### Mere Word Mass Alternative

"The alternative would be to let the program become a mere mass of words without consistency or purpose, with those able to exert the greatest pressure absorbing the bulk of the funds to the exclusion of other needed projects."

Assurance was given, however, that the strongly criticized rules dealing with the obligations of the sponsor were being rewritten so that the basis of mutual trust between federal and local governments may be more apparent.

CAA, Donaldson said, now realizes that its intention "to spell out procedures so plainly that the federal government was assured of protection . . . has been misconstrued due to unfortunate verbiage which made it appear we were excessively zealous in this direction. We are aware that local government has just as great an interest as federal in the efficient administration of this program."

### Timetable Outline

Donaldson outlined the timetable for the airport program as follows:

CAA was in hopes of announcing by the end of November the final version of the regulations governing the program.

Early this month, CAA expects to complete the National Airport Plan which will list the class and general location of airports it is agreed should be built during the next three years to meet immediate needs. (While federal aid can be given only to those airports listed in the plan, the mere listing itself does not guarantee an allocation of funds, he explained.)

The community concerned must submit a project request to CAA indicating interest and willingness to participate. These requests are the basis for formulating the annual program.

Late in December, CAA plans to announce the program for the fiscal year ending next June 30.

Once a grant has been executed, the local public agency can proceed to advertise for bids and award contracts. On this basis, it should be possible for construction to start next spring.

## PO Requests Airlines Improve and Stabilize Trips Carrying Mail

Asserting that frequent schedule changes by the airlines are disrupting air mail service and that some carriers are preparing schedules solely on the basis of passenger traffic, Second Assistant Postmaster General Gael Sullivan has asked for a stabilization of service and the setting of definite dates upon which changes would be made.

In a letter sent a few weeks ago to all airline presidents, Sullivan requested that all schedule changes affecting trips designated by the Post Office Department for mail be made effective on the first day of the month, and that the Post Office be informed on the 15th of the month prior to the effective date.

"The frequent and irregular schedule changes on the part of the airlines are disrupting our distribution, routing and dispatch of air mail, resulting in a service which is not fully effective," Sullivan said.

He added that "it appears at present some airlines are preparing schedules solely on the basis of passenger traffic, with the result that many large, important cities do not have favorable mail schedules and the air mail service provided is not satisfactory. It is our objective to provide overnight air mail service between large cities with arrivals in time for first carrier delivery."

Post Office officials state that response thus far to Sullivan's letter has been favorable.

### Hook Made Donaldson Aide

H. Arthur Hook, a veteran of nearly 20 years with federal aviation agencies, was recently named Deputy Assistant Administrator for airports by T. P. Wright, CAA administrator.

Hook will serve in Washington under Charles B. Donaldson, assistant administrator for airports, in the management of the federal airport aid bill.

## Transair, Inc., Buys 175,000 Shares to Get Cuban Airline Control

Transair, Inc., a charter operator with headquarters in New York City, has purchased 175,000 shares of the Cuban airline Expreso Aereo Inter-Americano, S. A., and will take over its active management.

The group buying into Expreso is headed by W. Deering Howe and Hugh McL. Fenwick, president and vice president respectively of Transair. These officials have indicated that they plan to take up Expreso's option to purchase Pan American Airways' 52% interest in Compania Cubana de Aviacion, the only other competing scheduled airline in Cuba. The option expires Jan. 25, 1947. Expreso stockholders have authorized the Cubana purchase but the deal is still pending.

The Howe-Fenwick group has also agreed to transfer to Expreso four DC-3's plus replacement parts, in exchange for \$350,000 five-year 4% convertible notes.

### First DC-3's on Miami Run

The first two DC-3's received will be put on Expreso's Havana-Miami run, increasing the service to five round trips daily. Another of the aircraft will provide daily non-stop service between Havana and Santiago de Cuba.

The fourth DC-3 will operate a daily round trip on the route Havana-Merida-Vera Cruz-Mexico City. During the war, Expreso operated for a time to Merida, but suspended services for lack of equipment.

The airline's smaller aircraft, consisting chiefly of Lockheed Lodestars, will be used exclusively inside Cuba and on the overwater route to the Isle of Pines.

Arrangements with the new financial interests also include an option on three more DC-3's and one 44-passenger DC-4. The DC-4 will be purchased if the U. S. and Canada act favorably on an application about to be filed for a scheduled Havana-Miami-New York-Montreal service, according to Donald Stewart, former executive vice president and now a director of the company.

### New Officers Due

A new slate of officers and directors will result from current discussions between Transair and Expreso interests. A majority of the officers will, however, be Cuban nationals.

The Cuban company is now headed by Jose de la Torre who recently became president following the resignation of Teodoro Johnson, prominent Cuban business leader. De la Torre is one of the original Expreso officials but resigned to head Cuba's OPA during the war, recently returning to active participation in the airline.

No indication has yet been given of the Transair officials or representatives to be put on the new Expreso board of directors.



# Non-Scheduled Exemption Order Revision Proposed by CAB

## Deletion of Trips per Month Limit Listed in Proposals

A new proposed revision of Section 292.1 of the Economic Regulations was released by the Civil Aeronautics Board on Nov. 22. This section, which has been referred to as the "Non-Scheduled Exemption Order," constitutes the legal authority under which all types of air carriers who do not have certificates of convenience and necessity must conduct their operations.

Several highly important new proposals are offered by the board. Among them are:

1) A proposed classification of non-certificated air carriers, with varying exemptions for each type.

2) An abandonment of the board's previous stand that it would limit non-scheduled lines to a certain number of trips per month.

3) The inclusion in the new proposal of specific exemptions for cargo line and for freight forwarders as well.

4) A proposal for giving non-scheduled operators "Letters of Temporary Authority" which will serve as a form of operating authority. If the proposed regulation is adopted, no non-scheduled line can operate without such a letter.

The Board said its new proposals were based on a number of comments it had received on an earlier proposed revision of 292.1. It set Jan. 6, 1947, as the date for oral argument on the newest set of proposed rules, and asked every party who wants to be heard at that time to notify the Board's Secretary by Dec. 23. Any party who prefers to make its comments in writing rather than at the oral argument should file such comments by Dec. 23.

### Three Classes of Carriers

The proposed regulation sets up three classes of non-certificated carriers. Class I embraces Non-Certificated Irregular Air Carriers, and is subdivided into Group I and Group II carriers. The distinction is based on aircraft weight. A Group I carrier is one which uses in its operations any single plane licensed for more than 6,000 pounds gross take-off weight, or five or more planes whose total gross take-off weights exceed 25,000 pounds. Group II Non-Certificated Irregular Air Carriers are operators whose equipment does not fit the Group I limits.

The second general class proposed by CAB is called Non-Certificated Air Cargo carriers. This is the first time the Board has proposed a separate classification for such operators. Freight forwarders are included in the proposed Class 3, labelled Non-Certificated Indirect Air Cargo Carriers. In this latter group fall all non-certificated companies who engage indirectly in interstate, overseas or foreign air transportation of property only.

To qualify under Class Two—Non-Certificated Air Cargo Carriers—the company must apply for a certificate of convenience and necessity within 30 days after the proposed revision of 292.1 takes effect. In the case of foreign cargo carriers, the Board proposed to set no filing limit, but has worded the regulation to require an application for a certificate.

Exemptions from various parts of the Civil Aeronautics Act which all scheduled airlines must meet are provided for each class set up in the proposal. Such exemptions are made broader or more narrow depending upon the type of operation. All are permitted to operate without certificates under the exemptions, but the Board plainly contemplates that air cargo operators and freight forwarders shall eventually come under strict regulation, including the certificate of convenience and necessity requirement.

### 60 Day Exemptions

For non-certificated air cargo carriers, the exemptions are good only for 60 days after CAB has acted on each carrier's certificate application. The exemptions for Indirect Air Cargo Carriers are valid only for 60 days after the Board has issued its decision in the Freight Forwarder Case. (Docket 681 et al.)

The Board also proposed in its draft regulation to set up a new form of operating authority, to be known as the "Letter of Temporary Authority." In effect, this means that CAB is applying its regulatory powers to nearly every type of non-scheduled enterprise.

The letters will be issued by the Board after the carriers apply for them. The application form will require certain corporate and other information to be submitted.

As one wholly new feature of the "Letters," the Board proposes to revoke any temporary letter of authority held by a Non-Certificated Irregular Air Carrier (passengers and property) if the operator "uses the word 'way' or 'line,' either alone or in combination with any other term (as, for example, such combinations as 'airways,' 'airlines,' etc.) as part of its name under which it conducts its operations or does business with the public." The Board said it thought this rule would help to keep clear in the public's mind the distinction between certificated airlines and non-certificated carriers.

In addition, the proposed new regulation provides that each Letter shall contain a brief description of "the character and scope of authority granted." The Board said it would require each carrier holding such a letter to use this description in full in any type of advertising; to display it prominently in its offices; and to post a copy inside each of its planes.

As an additional temporary exemption, the Board proposed to allow three months

following adoption of the new draft regulation during which all non-certificated lines will be free to operate in overseas and foreign air transportation without certificates of convenience and necessity.

The Board also pointed out that any operator who wants to obtain the benefits of exemption as an Irregular Air Carrier must make sure that his operations are "of such irregular character as to avoid the establishment or offering of a reasonably consistent pattern of operations between any two points." It also said there was nothing to prevent any operator from holding letters of temporary authority for all three types of exempt operations.

## European Charter Operations to Flourish

Charter operations in Europe are going to blossom out in large quantity as soon as tourists begin pouring into Europe in 1947 and 1948. Already in England there are scores of charter companies, some of which are doing good business to the Continent and beyond.

Most spectacular development will be charter flights to show the invasion coast of France to tourists, and aviation experts believe there is an almost unlimited gold mine in this field for a few years.

Every tourist from North America will want to see the wreckage which still lines the coast for a long distance and to have guides point out the battle scars from the air. If and when Germany is opened up for aerial sightseeing, the ruined German cities will be the biggest of all tourist attractions.

Although this tourist business will be seasonal, charter companies believe they can pay all their expenses for the remainder of the year, and then some, by the lush business that will be available. For the first time in history the scars of a major war can be seen best by air.

### Beverly Howard Heads NATA

Beverly "Bevo" Howard, of Orangeburg, S. C., was unanimously elected president of the newly reorganized National Aviation Trades Association during its recent meeting in Cleveland. Norman Larson, Burbank, Calif., was elected first vice president, F. Leslie Marsden, Buffalo, N. Y., second vice president, and Wilfrid N. Post, treasurer.

### Non-Skeds Order 52 Martin 2-0-2's

Glenn L. Martin Co. has announced the order of 52 Martin 2-0-2 cargo transports by five non-scheduled operators. The new customers are: National Skyway Freight, 20 planes; Mutual Aviation, Inc., 12 planes; U. S. Airlines, 10 planes; Willis Air Service, 6 planes; and Airborne Cargo Lines, Inc., 4 planes.

### French Secretly Testing New Jet

The first French-built jet aircraft, the Leduc O-10, is currently undergoing test flights in secrecy, according to French sources.



## Safety Record of Domestic Airline Industry Through November 15 Is Best Since 1939

On the basis of passenger-miles flown, the domestic airline fatal accident rate through Nov. 15 was the lowest for any year since 1939, the year in which the best safety mark in the history of air carrier operations was made.

During the first 10½ months of this year the domestic airline industry flew an estimated 5,300,000,000 passenger-miles. Passenger fatalities during this period totaled 64, giving a ratio of 1.21 passengers killed for each 100,000,000 passenger-miles operated. Or stated another way, the airlines in their greatest traffic year have operated approximately 82,000,000 passenger-miles for each fatality.

This compares with a ratio of 2.14 passengers killed for each 100,000,000 passenger-miles flown last year, or only 46,772,000 passenger-miles for each fatality.

The best record, according to official Civil Aeronautics Administration figures, was set in 1939, with a ratio of 1.20, or 83,309,000 passenger-miles for each fatality. The worst year in the last decade was 1942 when the ratio stood at 3.71.

Through Nov. 15 there were five domestic airline accidents involving both crew and passenger fatalities, plus two others in which crew members only were killed. For the same period of 1945, there were six involving both crew and passengers, and one in which a pilot was killed.

The accidents this year have proved fatal to more pilots and crew members than in any previous year, with a total of 19 being killed.

The year by year record of airline accidents is shown below. All figures are official CAA, except for the first 10½ months of this year. Since official airline traffic reports are available only through September, the 1946 figures involve a projection of the traffic trend through October and the first half of November.

	FATALITIES				
	Crew	Passengers	Passenger-Miles Flown Per Passenger-Fatality	Passenger-Miles Flown Per Crew-Fatality	Passenger-Miles Flown Per Passenger-Fatality
1930	14	15	20,927,000	4.78	
1935	9	24	3,500,000	28.57	
1939	3	9	83,309,000	1.20	
1940	10	35	32,784,000	3.05	
1941	9	35	42,820,000	2.35	
1942	18	55	26,945,000	3.71	
1943	8	22	74,863,000	1.34	
1944	10	48	47,172,000	2.12	
1945	12	76	46,772,000	2.14	
1946	19	64	82,000,000	1.21	

### Lockheed Cancels Voorhes Contract

As a result of general reorganization and curtailment of the Lockheed Aircraft Corp. sales group in Europe, the contract of Sol W. Voorhes as senior representative has been cancelled. Voorhes indicated he now has no business connection with Lockheed, but plans to rest for two or three months before carrying on personal activities in which he is interested. He said he plans to remain for the next several years in Geneva, Switzerland.



**Champ "Imagineer"**—United Air Lines Captain C. M. Christenson helped reduce pilots' eye fatigue by improving cockpit lighting with glare-proof system of his own developing. Not only UAL but the National Association of Suggestion Systems thought Christenson's idea was good, and the association followed UAL's \$2500 gift with a gold wrist watch presentation to the airline pilot.

## New Air Coordinating Committee Units Meet

Initial organizational meeting of the Air Coordinating Committee's new aviation industry panel was held last month in Washington. Members of the panel, which will advise on joint government-industry problems, are L. Welch Pogue, president of the National Aeronautic Association; Emory S. Land, president of the Air Transport Association; Frank P. Fenton, director of organization, American Federation of Labor; R. J. Thomas, Congress of Industrial Organization; Frank Caldwell, director of research for United Aircraft Corp., and representative of the Institute of the Aeronautical Sciences; and John E. P. Morgan, executive director of the Aircraft Industries Association.

Meetings have been held and work begun by ACC's economic division with Russell B. Adams, director of the CAB's economic bureau, as chairman; by the technical division with T. P. Wright, civil aeronautics administrator, as chairman, and by the PICAQ (Provisional International Civil Aviation Organization) panel, under chairmanship of Livingston Merchant, chief of the State Department's aviation division.

Permanent secretaries have been appointed to these units to assist the chairmen on a full time basis. Secretary of the economic division is Norman P. Seagraves, formerly with the division of international conferences of the State Department. John A. Cray, who was the War Department's liaison representative with ACC, will serve as secretary of the technical division, while Walter W. Wilds will function as secretary of the industrial division and also of the PICAQ panel.

## All American Flag Line to Get New Support in Congress

By GERARD B. DOBBEN

The fight to establish a community company to represent the United States in the field of international aviation will be renewed on Capitol Hill early in the next session of Congress.

From authoritative sources, it has been learned that Sen. Pat McCarran (D., Nev.) will re-introduce his All American Flag Line bill soon after the opening of the 80th Congress. With Republicans holding a majority in the Senate, the bill's chances of passage may be improved over what they were before.

When his party was in power, Sen. McCarran was the lone Democrat who actively plumped for this legislation. He had support from other Democrats when votes were taken but the burden of pressing the issue rested largely on his shoulders.

Sen. Brewster Equally Zealous

This picture is changed when it is realized that the leading proponent on the Republican side, equally as zealous as McCarran in efforts to get the bill passed, is Sen. Owen Brewster of Maine. And Brewster, slated for a place on the Foreign Relations Committee, will be in a position to exert a greater influence on this country's international policies than ever before. Many times international aviation matters come before both the Foreign Relations Committee and the Interstate and Foreign Commerce Committee.

McCarran's All American Flag Line bill would be referred to the newly created Interstate and Foreign Commerce Committee. It would be assured of friendly treatment because Sen. Wallace H. White, Jr., of Maine, is slated to become chairman of this committee.

Influential in Committee

While it appears doubtful that McCarran will be on the Interstate and Foreign Commerce Committee because the reorganization law limits a member to service on only two committees, it is believed that McCarran will wield sufficient influence to get several Democratic members of the committee to support the bill and vote it out to the floor.

While it is true that the bill will have a better chance of getting through the Senate under the new line-up, there is good reason to doubt that it could be passed over a Presidential veto.

That a Presidential veto could be expected may be deduced from the fact that President Truman and his administration are committed to the competition theory in U. S. international aviation. Under this policy, three U. S. carriers have been certificated across the North Atlantic, and other U. S. carriers are being given routes to other parts of the world.

# Pan Am Faces Stiff Opposition In Bid for Domestic Network

**13,242 Route Miles at Stake  
In Atlantic City CAB Hearing**

By DANIEL S. WENTZ, II

**M**ORE than \$100,000,000 worth of domestic air transportation business is at stake in Atlantic City, N. J., where Pan American Airways is unfolding before Civil Aeronautics Board Examiner William J. Madden its plea for 13,242 miles of domestic routes.

In the opposition box are 12 domestic airlines, who hope to show, when their day in court comes later this month, that PAA's proposed domestic network would seriously damage the entire domestic airline setup.

Pan Am's application asks long distance non-stop or one-stop routes, linking nearly every major city in the U. S. with services which would parallel in most cases the existing routes of domestic airlines. These routes, PAA, says, are needed to tie together the 13 terminals which it now serves on its international system. They would close the last gap in PAA's world-wide air transport system and end PAA's status as a wholly international airline.

## PAA Presents Case

Pan American, as the only applicant, began putting on its case last month following a number of appearances by city representatives. It presented a group of top company officials, backstopped by two consulting experts. One of the latter was Charles A. Rheinstrom, former vice president-traffic of American Airlines and one of the top traffic men in the industry.

As lead-off man and policy spokesman, Pan Am presented John C. Leslie, a seasoned vice president who formerly bossed PAA's Atlantic Division. He maintained that domestic routes for PAA would: 1) provide improved domestic nonstop and long haul service from

coast to coast and from border to border; 2) mean improved one carrier international service from 13 major U. S. cities to all points served by PAA abroad; 3) strengthen Pan Am's far-flung international system by fixing its terminals firmly in the rich traffic-producing areas of the U. S., and 4) not have an adverse effect on the domestic lines.

As additional reasons, Leslie told Examiner Madden that domestic routes would help Pan Am to unify its present decentralized maintenance setups; would result in savings to the taxpayers by cutting down the need for mail pay subsidies on some international routes; and would put the entire Pan American network on a firm economic footing.

To fly the domestic routes, Pan Am said it would use 13 four-engined Republic Rainbows and 37 Boeing Stratocruisers. It offered fares at 4c per passenger mile, some sixteen percent below the present domestic fare, pointing out that this low rate would probably spur a general fare cut in the industry.

## Exhibits Presented

In its exhibits, PAA estimated it would take some \$114,191,000 in total revenues from its domestic routes. Minus estimated expenses of \$97,873,000, this sum, the company said, would leave a net profit of more than \$10,000,000 after income taxes were deducted. To set up the operation, it said it would have to make an investment of \$104,474,510.

Leslie claimed that only if given domestic routes could PAA hope to compete with foreign airlines who have been authorized to fly across the U. S. as the result of international agreements. He pointed out that it would be irrational to stop PAA at the borders while allowing foreign flag carriers inside the U. S.

The PAA executive also said that his company would have to have the privilege of carrying purely domestic busi-

ness if its domestic routes were to be a paying proposition.

## Cross-Examination Follows

Following his direct testimony, Leslie went through a four-day cross-examination. The cross-examination, of course, was the first phase of the domestic lines' attack on PAA's proposal. From Leslie, the opposition lawyers extracted an admission that Pan American had not yet ordered any of the Rainbows or Stratocruisers it proposed to fly domestically. The attacked the \$200,000 advertising program which PAA has been using to familiarize the public with its domestic plans.

Attorneys for the U. S. Post Office wanted to know just how domestic routes for PAA would mean a reduction in mail pay on PAA's foreign routes, but Leslie maintained he could offer no more specific information than to state that lower mail payments should be possible if PAA's entire system were strengthened by domestic routes.

## Rheinstrom Takes Stand

Charles A. Rheinstrom, aviation consultant under indefinite retainer to Pan American, followed Leslie as a witness. Domestic carriers, he pointed out, have certificates for both terminal and intermediate points.

Because intermediate stops are usually profitable to serve, the airlines must balance their services to take care of both local and long haul passengers. As a result, they are not able to offer all the long haul non-stop service required. Pan American, Rheinstrom claimed, would resist the "temptation" of serving intermediate points in order to concentrate on long haul flights.

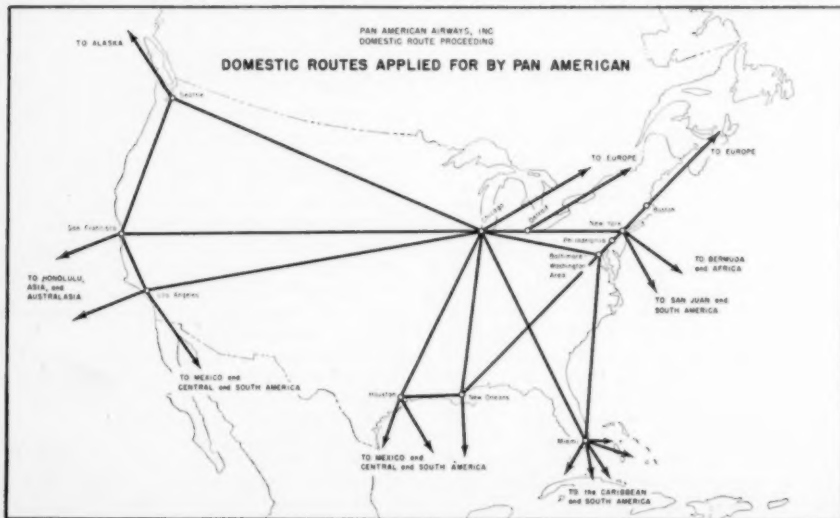
In criticism of the domestic industry, Rheinstrom stated that the airlines are providing inferior service. "I think the airlines themselves have virtually asked people to be wary of them," he said, because "they have let the public know it can't have good service this winter." Speaking of current setbacks in the industry, Rheinstrom said: "The airline business deserved that setback."

Rheinstrom predicted that all domestic lines, including Pan American, would fly 25,000,000,000 revenue passenger miles annually in 1949. (The total for 1946 will fall somewhere between six and one half and seven billion passenger miles).

## Lounsbury Follows Rheinstrom

Still to come were Richard C. Lounsbury, PAA's assistant general traffic manager, two PAA operations witnesses and an economic consultant. It seemed likely that the domestic lines would hardly get to begin their opposition cases much before Dec. 1.

Unanticipated, but nonetheless welcome, support for the domestic lines was thrown into the hearing by the Post Office Department. The Post Office didn't come out in opposition to the routes asked for, but it said very plainly that Pan Am's proposals would duplicate on a tremendous scale routes already operating. The exhibits also suggested that PAA might corner enough of the domestic airmail business to make higher mail rates necessary for many of the lines now carrying the bulk of the mail.



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## World's Largest Propellers

### DRIVE THE B-36 SUPER-BOMBER

Controllable propellers *larger than any previously produced* were required to harness the mighty horsepower of the six engines powering Consolidated-Vultee's great B-36 Super-bomber.

To Curtiss-Wright went the task of developing for the Army Air Forces an entirely new propeller which *reverses in one second and feathers in less than two*.

Like all Curtiss propellers, operation of its self-contained mechanism is *unaffected by temperature and altitude change*. The nineteen foot diameter steel blades are *de-iced by passing*

*beated air* through their hollow structure. Using the Curtiss automatic synchronizer, *six propeller-engine speeds are perfectly matched* under all conditions and can be adjusted simultaneously or individually.

★ ★ ★

Curtiss propellers have been specified for every new four-engine bomber and transport aircraft now in production for the Army and Navy and for the majority of the new four-engine airliners.

#### Other Achievements of Curtiss Propeller Pioneering

- FEATHERING PROPELLERS
- HOLLOW STEEL BLADES
- REVERSIBLE PROPELLERS
- AUTOMATIC SYNCHRONIZATION
- UNIT CONSTRUCTION
- SELECTOR CONTROL



# CURTISS

## PROPELLERS

AMERICAN  
 CURTISS-WRIGHT  
MADE IN U.S.A.





***Only time will tell*** how great a slice of the world's transportation, both freight and passenger, will eventually be airborne. Much will depend on how well airlines will be able to compete with other forms of transportation. Truck and bus operators, for example, hope to speed schedules, improve payloads and cut costs through the use of engines built to take advantage of the extra available power in high antiknock gasoline. In the same way, improved aviation gasoline offers an opportunity for developing even more powerful and efficient aircraft engines which will help keep down operating costs.

*Ethyl Corporation*  
Chrysler Building,  
New York City



*Manufacturers of Ethyl fluid, used by oil companies  
to improve the antiknock quality of aviation and motor gasolines.*



# MILESTONES OF LEADERSHIP



ASSURED COMFORT

Stretch out! Scandinavian Airlines carries only 28 in Douglas DC-4's designed to carry 60 passengers. Comfort service via Copenhagen, Oslo, Stockholm, and Prestwick, Scotland. Fast, direct connections to all Europe.



# First National Aircraft Show Draws 100,000 in Cleveland

**Industry, Aided by Army and Navy, Unfold Air Panorama**

By DAVID SHAW

The first National Aircraft Show, sponsored by the industry through the Aircraft Industries Association, closed its doors last week after a ten day run at the Fisher Bomber plant at Cleveland Municipal Airport. In addition to being the biggest cooperative promotion job ever undertaken by aviation people, it was one of the biggest indoor shows ever staged anywhere. A crowd estimated in excess of 100,000 people covered the half million square feet of exhibit area during the ten day show.

Although primarily an industry show, the Army and Navy occupied the largest exhibit area and attracted a substantial part of the crowd, contributing materially to the success of the "Air Power is Peace Power" theme of the show. Other drawing cards for the public were the light-plane exhibit, helicopter displays, and an "International Bazaar" featuring items brought by air from all over the world by the Air Transport Association. An extra attraction was a girl band which staged daily indoor parades and concerts.

As at any aviation show, it was the airplanes that got the most attention. Scores of them, ranging in size from the Army's record-breaking B-29 Pacusan Dreamboat down to two-place personal planes, failed to give a crowded appearance to the vast indoor area. Alongside

the Dreamboat the Army had another B-29 fuselage windowed to show interior arrangement of the plane. Nearby was a Fairchild Packet cargo transport, and a Naval Air Transport Service R5D (C-54) hospital plane. The Navy displayed more than a dozen advanced-type combat planes, including the McDonnell Phantom, the Ryan Fireball, Grumman's F6F, F7F and F8F Bearcat, the "Truculent Turtle" P2V patrol bomber built by Lockheed, the new Douglas AD-1, and Curtiss-Wright's BTC-2 and BT2C. Also shown, for the first time publicly, was the new Fairchild XNQ trainer.

The large area set aside for personal plane exhibits held planes as big as the Beech 18 and as small as the new Aeronca "Chum." Altogether, nine manufacturers showed more than 15 different lightplane types and styles. Several manufacturers drew out of town visitors by holding dealer conventions in conjunction with the show.

The helicopter display, which had as much appeal for the crowd as any other section of the show, included several types and variations never before included in a general exhibit. Bell, Firestone (G & A) and Sikorsky all showed two-place helicopters, and Bell and Sikorsky had four-place models. Public interest in the machines was heightened by a helicopter shuttle service which operated between the show and downtown Cleveland.

Five major manufacturers of larger transport aircraft (Boeing, Consolidated, Douglas, Lockheed and Martin), although

not yet ready to show their latest models complete, had large and attractive exhibits and lounge areas in the "transport circle" around the A.T.A.'s international bazaar. Several other big-plane companies had extensive exhibits but featured other products rather than transport planes.

Engine and accessory manufacturers used nearly half of the entire show area with displays ranging from small booths to complete sections. Industry visitors and the general public found many products being shown for the first time, and many others displayed in understandable working models and cutaways. Descriptive literature was available from most exhibitors.

A predominant theme at the show was equipment and methods to be used in future air activity. The Civil Aeronautics Administration and the National Advisory Committee for Aeronautics gave visual presentations of their research and development work, particularly in all-weather flying and supersonic speeds. The Army and Navy showed several guided missiles never before seen by the public. Jet and rocket power plant developments were in evidence throughout the show.

## DNL to Fly North Pole Tourist Hops in 1948

The goal of explorers for centuries—the North Pole—will be available in greatest luxury to tourists in 1948. DNL, the Norwegian airline, is planning to operate charter flights over the Pole during the summer months to give curious tourists the most spectacular thrill in air transportation.

DNL currently is operating to the north of Norway and will extend regular service to Spitzbergen. It plans to build a good hotel on this island and use flying boats for an estimated eight-hour trip north over the Pole and return.

During the summer months the sun never sets in the far north and tourists will be provided with not only a 24-hour sun but unusual sky colorings and the atmosphere of Arctic life.

Flying boats will be used because of the difficulty of building a landing field at Spitzbergen and because of the general absence of fields in the northern part of Norway. DNL will serve cocktails and lunch while circling the Polar regions.

Bernt Balchen, foremost expert on Arctic flying, says weather conditions over the Pole in the summer are generally excellent. Balchen is co-managing director of DNL.

## Smart Resigns From Air Power League

C. D. Frazer, secretary and assistant treasurer of the Air Power League since March 1945, will henceforth direct the activities of the organization in lieu of Jacob F. Smart who has resigned as executive vice president due to a pending military assignment with the Army Air Forces, according to F. Trubee Davison, League president.



**Bell XS-1**—The Army Air Forces have announced that flight tests of the XS-1, Bell Aircraft Corp.'s latest military project designed for speeds above the sonic range, will begin shortly at Muroc Flight Test Base, Calif. Chalmers H. (Slick) Goodlin, Bell test pilot, will put the bullet-shaped plane through its preliminary speed tests. The alcohol and liquid oxygen burning engine built by Reaction Motors, Inc., is supposed to supply power adequate to propel the XS-1 at a speed of 1700 mph. at 80,000 feet. The AAF, Bell, and the National Advisory Committee for Aeronautics cooperated in the plane's design.

# AMERICA has THE WORLD'S BIGGEST BOMBER!



**B-36**

Photographed on recent test flight

**T**HIS is the giant B-36—the biggest land-based bomber ever built.

Manned by a crew of 15 men, it is designed to carry 10,000 pounds of bombs 10,000 miles. Its top speed is more than 300 miles per hour. Operating from airports available to us, the B-36 could, if this country were attacked, drop bombs on any city in the world.

Just how big is "the world's biggest bomber"?

Imagine a tail fin that is almost as tall as the average 5-story apartment building! Fuel tanks so large that more than 2 railroad tank cars are needed to fill them!

Six pusher-type engines with a total of 18,000 horsepower! A wingspread as great as that of two B-24 Liberator bombers, with 10 feet to spare!

Designed and built by Consolidated Vultee, in conjunction with the United

States Army Air Forces, the mammoth B-36 is a mighty symbol of peace-loving America's determination to remain strong in the air—to preserve the peace through strength!

The awe-inspiring B-36—first of a fleet of such long-range bombers now under construction—is one of Consolidated Vultee's important contributions to this nation's protective strength in the air.

## And THE WORLD'S MOST MODERN TWIN-ENGINE AIRLINER is on the way!



**CONVAIR 240**

America's leadership in commercial aviation is a must, too.

Consolidated Vultee is now building the most modern twin-engine airliner the world has ever seen. This new 300 MPH transport, known as the Convair-240, will be flying the skyways next summer.

Fleets of Convair-240's have already

been ordered by American Airlines, Western Air Lines, Pan American World Airways, Continental Air Lines, and KLM (Royal Dutch Airlines).

Your first flight in the Convair-240 will be an experience you will want to repeat over and over again—when ever you want to travel faster, and with greater safety and comfort!

Let's keep America strong in the air!

**Consolidated Vultee Aircraft Corporation**

San Diego, Cal. • Downey, Cal. • Wayne, Mich. (Stinson Division) • Fort Worth, Texas • Nashville, Tenn.



## CAB Air Freight Case Hears Slick Airways' Witnesses in Ft. Worth

In Fort Worth, Tex., last month, examiners of the Civil Aeronautics Board opened hearings on the air freight case. The testimony they began taking will form the basis for the Board's first decision on freight airlines—a decision which should set a pattern for that type of carrier for a number of years.

Because the hearing was to be held in two sections, one in Fort Worth and a second in Washington beginning December 2, some of the biggest non-scheduled freight carriers are yet to be heard.

Slick Airways, one of the largest, did put on its case in Fort Worth. Earl F. Slick, 26-year old president of the company, urged "a new area concept in air freight certification—probably a separate regulation for air freight carriers eventually."

He accused the certificated airlines of neglecting the freight business, pointing out that in October his company had hauled 2,034,035 ton-miles of air freight compared with the 1,707,744 ton-miles carried by all the domestic airlines in August, the last month for which complete figures are available.

Slick said the major airlines had produced "much lethargy, some talk and a small amount of research, but little or no action—and practically no air freight."

Other applicants sided with Slick on the area concept for freight carrier certificates, but opposition to their proposal developed from other lines who want certificates that name fixed points. Certificated airline interveners—among them American, Braniff, United and TWA—attacked the area concept during cross-examination of Slick.

The cargo line president insisted he was not interested in hauling mail or passengers, claiming that such operations required more or less fixed schedules. He explained that a cargo service could not reach its full utility unless it had complete flexibility to meet seasonal highs and lows in various types of traffic.

John Drew, a St. Louis aviation consultant of the firm of Drew and Peters, testified as a Slick witness. He predicted that the 1947 U. S. air freight potential amounted to 1,200,000,000 ton-miles. Drew also stated that a reasonable rate for air cargo would be 12½¢ per ton-mile.

A former AAF colonel, Samuel F. Dunlap III, who is now executive vice president of the Slick organization, pointed out that the flexible scheduling pattern proposed by his company could be achieved by modifying its present contract operations only slightly. This, he said, was proof that air cargo could be developed on such a basis.

The case is being heard by CAB Examiners William F. Cusick and R. Vernon Radcliffe.

## Martin 202 Makes First Flight

The first flight of the Martin 202 twin-engined 40-passenger aircraft on Nov. 22 was described as completely successful by O. E. "Pat" Tibbs, veteran chief test pilot of the Glenn L. Martin Co. Eight other 202's are well along on the production line and first deliveries are expected early in 1947, with Pennsylvania-Central Airlines slated to receive the first one.

## Beechcraft Bonanza Certificated by CAA

Certification of the Beechcraft Model 35 Bonanza by the Civil Aeronautics Administration was announced last month by Walter H. Beech, president of Beech Aircraft Corp. The four-place, all-metal personal plane had been undergoing a flight test development program since its first flight Dec. 22, 1945.

Deliveries are scheduled to start from production tooling about Dec. 10, and are expected to accelerate rapidly during the first quarter of 1947. Present backlog for the plane is more than 1,500.

The company is expanding its advertising budget for next year to publicize the Bonanza and the Model 18-S twin-engine executive transport. Main theme will be the utility of both craft for business and private use. In addition to the domestic campaign several export magazines will be used to advertise the planes in foreign markets. Erwin, Wasey & Co., Inc., New York, is the agency with Charles S. Hart, vice president, the account executive.

Certification of the Bonanza came several weeks after a crash of one of the models fatal to company test pilot, Harry Reiter. Explaining the accident, company officials stated that it occurred during a dive test, when, with the plane traveling 287 mph, true airspeed, a minor failure, apparently of the landing gear outboard doors, caused destructive vibration stresses throughout the entire airplane. Multiple failure of the main structure resulted.

Pointing out that this speed was 100 mph above its maximum level speed at any altitude, John P. Gaty, vice president and general manager, said, "no fittings failed. All of the brackets and connecting bolts which joined the various structural parts of the airplane together were intact after the crash. The CAA inspectors were amazed that the engine and propeller unit stayed with the airplane and was still attached even after contact with the ground."

## E. E. Wilson Resigns from United

The resignation of Eugene E. Wilson as a director of United Aircraft Corp. was announced by the company, Nov. 19. Wilson previously had resigned his post as vice chairman of the board.

United Aircraft also revealed the resignation of Joseph F. McCarthy as a director and finance chairman.

## Taylorcraft Petitions Under Bankruptcy Law

Hearing has been set for Jan. 7 in Federal court in Cleveland on a petition of Taylorcraft Aviation Corp., Alliance, O., for permission to reorganize under the bankruptcy law.

The petition asked that Nash Russ, president, be named trustee. It listed assets as \$4,982,059 and indebtedness as \$2,807,122. The latter includes \$276,000 in withholding taxes due the government, \$634,000 in trade debt, and \$120,000 due on interest and debt payments.

Judge Emerich B. Freed named H. A. Hauxhurst and Jerome N. Curtis, Cleveland attorneys, as co-trustees. One problem involved is a matter of \$34,000 in pay owed to about 600 employees. The company's funds were impounded when it petitioned for reorganization.

## Air Mail Boosted 40% Following Rate Drop

The stimulating effect of the new nickel rate on air mail volume is shown by Post Office Department figures which reveal that 28 regional post offices in October averaged an increase of 40.6% over September when the 8c rate prevailed.

Based on reports from these offices which handle 70% of the nation's air mail business, an estimated 212,538,510 pieces of mail were carried by domestic airlines during the first month of the 5c rate, an increase of almost 61,500,000 over September.

San Francisco led the regional offices with a gain of 82.7%. Ten of the field post offices registered air mail gains of more than 40% during October:

### POUNDS DISPATCHED

	Sept.	Oct.	Increase
San Francisco ...	273,580	499,903	82.7%
Nashville .....	40,966	71,683	74.9%
Newark .....	113,916	178,452	56.6%
Los Angeles .....	378,112	560,599	49.1%
Cleveland .....	71,316	102,900	44.3%
Chicago .....	518,236	744,642	43.6%
Cheyenne .....	12,222	17,448	42.7%
New Orleans .....	62,364	88,459	41.8%
New York .....	487,128	690,943	41.8%
Memphis .....	46,464	65,675	41.3%

## CAA Drops Eye Refraction Test from Pilot Examination

The Civil Aeronautics Administration has dropped the eye refraction test as a part of the physical examination of commercial pilots, after five months' experience proved the requirement unnecessary for flying safety.

The refraction test was adopted only last April 30, upon recommendation of the committee on medical problems in civil aviation of the National Research Council. In reversing itself, the CAA also eliminated the specific fee established for the examination. "No specific fees for physical examinations for pilots of any class are now set by the CAA," Administrator T. P. Wright said.

# Chicago Tests Strengthen PO Attitude on Helicopter Lines

## Report Reveals Operating Cost Data; Favors Small Machines

The Post Office Department's already-favorable attitude toward the establishment of helicopter air mail routes is now expected to be even stronger as a result of a report of its inspectors on the results of recent helicopter tests in the Chicago area.

Although the detailed report has not been given wide publicity, PO officials make no secret of the fact that they are highly pleased with the results of the tests, and with the thoroughness of the inspectors in going into details of operating costs, anticipated advantages of permanent routes, air mail statistics, etc.

The tests, involving 307.3 miles of routes around Chicago, were held between Oct. 1 and 18. Northern, western and southern routes, plus a shuttle service between the Chicago airport and the downtown post office, were operated with Sikorsky helicopters.

"It is our conclusion," said M. H. Ackerman, Post Office inspector-in-charge, "that a helicopter air mail service patterned in accordance with the proposed routes described, is justified in the Chicago area from the standpoint of expediting the air mails. While the volume of mail is much less than that expected, there is every reason to believe that it will increase considerably.

"In fact, since the 5c rate became effective Oct. 1, 1946, and to the last day of the experiment, Oct. 18, 1946, increases in the volume of air mail ran as high as 300% in some offices."

### Average Haul Under 300 Lbs.

Of interest in industry circles will be Ackerman's statement that "average mail cargo per trip is much less than 300 lbs., which will permit use of the small Bell B-47 at far less operating cost than the Sikorsky S-51."

Post Office officials explain that this does not mean that the PO has gone on record as favoring one model helicopter over another, but merely means that a smaller ship can be used, be it a Sikorsky, Bell or any other make.

The report listed hourly operating costs of the Sikorsky as: fuel and oil, \$4.29; maintenance and service, \$4.17; depreciation, \$11.45; replacement parts and overhaul, \$7.80; pilot's costs, \$6.67; insurance, \$3.73; hangar rental, 50c. or a total of \$38.61 per hour.

At an average speed of 75 mph. per-mile cost would be 51c, and on the basis of 5,202 hours per year and 349,571.3 miles flown, cost would total 54.4c per mile.

### Bell Costs Listed

Based on the same annual miles and hours, and assuming a fleet of seven

machines, the report said that the Bell 47 costs would be:

Item	Annual	Hourly
Fuel	\$8,115.12	\$1.56
Lubricants	8,028.78	.39
Depreciation	35,000.00	6.73
Spare parts	17,500.00	3.36
Insurance		
Hull	8,750.00	1.68
Public liability and property damage	1,404.54	.27
Personnel		
Pilots' costs	40,000.00	7.69
Mechanics	24,000.00	4.61
	<b>\$136,798.44</b>	<b>\$26.29</b>

Proposed overall scheduled speed would be 60 mph. with block-to-block of 67.2 mph. Ackerman's report said, adding that cost would be 39.1c per mile. No estimate was made of additional ground costs or other overhead.

Loads on the northern route, serving 16 communities, varied from five to 109 lbs. during the tests; on the western, with 15 towns, 38 to 46 lbs., and on the southern, with 12 stops, 34 to 53 lbs.

On the northern route, the post offices handle an average of 18,497 pieces of air mail daily, and "50% of all air mail at these offices can be expedited by helicopter from three to 18 hours," Ackerman said. On the southern route, where 11,975 pieces are handled daily, 50% of the mail would be expedited from two to 16 hours, and on the western segment, 50% of 10,365 pieces would be expedited from two to 15 hours.

Going into the economics of the proposal, the report pointed out that the northern route's gross annual revenue from air mail is \$335,580.32, and that after using 72.23% of this (based on Post Office cost ascertainment figures) to pay for transportation and handling, a net of \$93,190.65 remains.

Although the report does not specifically state, it is said that these figures were included to show that this net would be available to pay for the helicopter service. The western route's net is \$51,110.42, and the southern's \$60,331.94.

## Aviation Calendar

Dec. 2—Aeronautical Show Council meeting, Washington, D. C.

Dec. 2-4—SAE National Air Transport Engineering Meeting, Edgewater Beach Hotel, Chicago.

Dec. 3—PICAO Rules of the Air and Air Traffic Control Practices Division meets in Montreal.

Dec. 3—Air Transport Association Board of Directors meeting, Washington, D. C.

Dec. 4-5—Air Transport Association annual membership meeting, Washington, D. C.

Dec. 10—IATA North Atlantic Traffic Conference, New York.

Dec. 12-15—Second annual International Aviation Celebration, El Paso, Tex., auspices Chamber of Commerce.

Dec. 16-18—Aviation Distributors and Manufacturers Ass'n fourth annual meeting, Edgewater Beach Hotel, Chicago.

Dec. 17—Anniversary dinner, Washington, D. C., Aero Club, Statler Hotel.

Dec. 17—Tenth Wright Brothers lecture, auspices IAS, U. S. Chamber of Commerce Auditorium, Washington, D. C. 3:30 p.m.

Jan. 10-12—15th Annual All-American Air Maneuvers, Miami.

Jan. 6-16—Aviation of Tomorrow Exhibit, Miami.

Jan. 27-30—Fifteenth annual meeting, IAS, New York.

Feb. 1-28—Inter-American lightplane cavalcade, Brownsville-Panama.

Feb. 1-8—New York Aviation Show, Grand Central Palace.

Towns involved in tests on the northern route were Berwyn, Oak Park, Park Ridge, Glenview, Evanston, Wilmette, Winnetka, Glencoe, Highland Park, Lake Forest, Waukegan, Libertyville, Barrington, Palatine, Arlington Heights, and Des Plaines.

Southern route covered Blue Island, Harvey, Whiting, East Chicago, Gary, Hammond, Lansing, Chicago Heights, Joliet, Lockport, Lemont and Argo. Western route was La Grange, Maywood, Elmhurst, Villa Park, Glen Ellyn, Wheaton, West Chicago, Elgin, St. Charles, Geneva, Batavia, Aurora, Naperville, Downers Grove and Hinsdale.

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# U. S.-India Bilateral Air Pact Opens Way for TWA and PAA

## Agreement Parallels Bermuda Reciprocal Rights Pattern

By FRANK M. HOLZ

The United States and India have signed a bilateral air transport agreement patterned generally after the Bermuda Agreements. The pact includes reciprocal rights to carry Fifth Freedom traffic between either signatory country and any intermediate territory.

Two main routes are granted to U. S. carriers. Route 1, to be operated by Pan American Airways, provides for traffic stops at Karachi, Delhi and Calcutta on the airlines' route through central Europe and the Near East and onward from India to other Far East points and to the U. S.

Route 2, to be operated by Transcontinental & Western Air, goes via the Near East to Bombay. At Bombay, TWA services will divide, one sector crossing India to Calcutta and on to China and Japan, the other going south to Ceylon and on to Singapore and beyond. TWA also receives traffic rights at all Indian points named.

### India Gets Reciprocal Rights

India receives reciprocal rights to operate to U. S. territory but no carrier is named and designation of the route is left to some future date.

Provision is made for the categories of traffic which may be carried, use of airports, control of rates, customs duties, exchange of information and statistics, and change of size or type of aircraft en route ("change of gauge").

Rates shall be set at "reasonable levels, due regard being paid to all relevant factors." Both nations "desire to facilitate" rate agreements by International Air Transport Association conferences but maintain complete independence with regard to accepting or rejecting the actual rates set by IATA.

As in similar air agreements with other nations, the executive authorities of the U. S. are pledged to seek legislation empowering the CAB to fix rates for international air services.

Disputes which cannot be settled by consultation shall be referred to the Council of the Provisional International Civil Aviation Organization (PICAO) for an advisory report.

Until the signing of this agreement, India represented one of the major gaps in diplomatic clearance for CAB's international route pattern.

When similar agreements are signed with all nations along the PAA and TWA network, PAA will be authorized to operate a round-the-world route except for transcontinental U. S. domestic services on which hearings are currently being held in Atlantic City. At the same time, TWA will connect in China with the trans-Pacific route of Northwest Airlines.

## Swedes, Russians Begin Service

The first postwar regularly scheduled through service between Moscow and a capital in western Europe was established Nov. 15 when the Swedish airline ABA and the Soviet airline Aeroflot began a joint service between Moscow and Stockholm. The two carriers connect at Helsinki, Finland, neither operating beyond that point.

## KNILM Makes Pacific Survey, Prepares for Regular Service

A Douglas DC-4 of KNILM Royal Dutch East Indies Airlines has made a trans-Pacific survey flight from Batavia to the U. S. via Biak, Kwajalein and Honolulu.

Regular service, on a non-scheduled basis, between Batavia and Los Angeles will start in December, according to William C. J. Versteegh, managing director. Flights will be under contract to the Netherlands East Indies Government but any vacant seats will be available commercially.

## Eire, Sweden Ratify Convention

Eire and Sweden have ratified the permanent Convention on International Civil Aviation, bringing the number of completed ratifications to 14. According to reports, Spain and India have also taken action to ratify the Convention but the necessary formal notice has not yet been received by the U. S. Department of State.

## SAS American Affiliate Elects

The board of directors of Scandinavian Airlines System, Inc., has elected the following officers: Tore H. Nilert, president; Max Westphall, Gert Meidell and Mark Maidel, regional vice presidents; Hamilton O. Hale, secretary; Alvar Ohlsson, treasurer. Fredrik W. Fischer is executive assistant to the president. Sten Unne will continue as assistant to Nilert until Fischer arrives from Scandinavia.

## TWA Anticipates Start Of Italian Subsidiary Service in December

TWA officials stated last month that they hoped to get the company's Italian subsidiary—Lines-aeres Italiane (LAI) operating soon after Dec. 1.

First operations, according to T. B. Wilson, chairman of the board of TWA and managing director of its international division, would be between Rome and Milan, and Rome and Turin in northern Italy.

Soon thereafter it was proposed to commence operations between Rome and Palermo, Sicily, via Naples, and between Rome and Cagliari in Sardinia. The company has 14 Douglas C-47 aircraft, converted to passenger use by the Italian aircraft factories—Fiat and Piaggio—under supervision of Douglas Aircraft Co. engineers.

Wilson revealed these plans during his appearance before a Civil Aeronautics Board hearing on TWA's application requesting approval of its agreement with the Italian government and with LAI concerning the operations of the Italian airline.

Wilson said that the first overtures leading to this agreement came from the Italian ambassador and that from there on, step by step, the State Department and CAB were kept informed of developments.

Due to what he termed was heavy handed pressure of the British, Wilson said the first agreement, signed in September of 1945, was modified so as to eliminate the provision which gave the TWA-Italian company exclusive operating privileges over the internal airlines of Italy. Since then a British company—Aerolinee Italiane Internazionali (AII)—has been organized and given rights in franchises held by some of the old Italian air transport companies.

To counteract possible advantages to the British, TWA obtained a memoranda agreement from Mario Cingolani, Minister of Aeronautics, designed to limit British competition on LAI routes to the degree that traffic would support the services of another carrier.

## DOUGLAS DC-3's

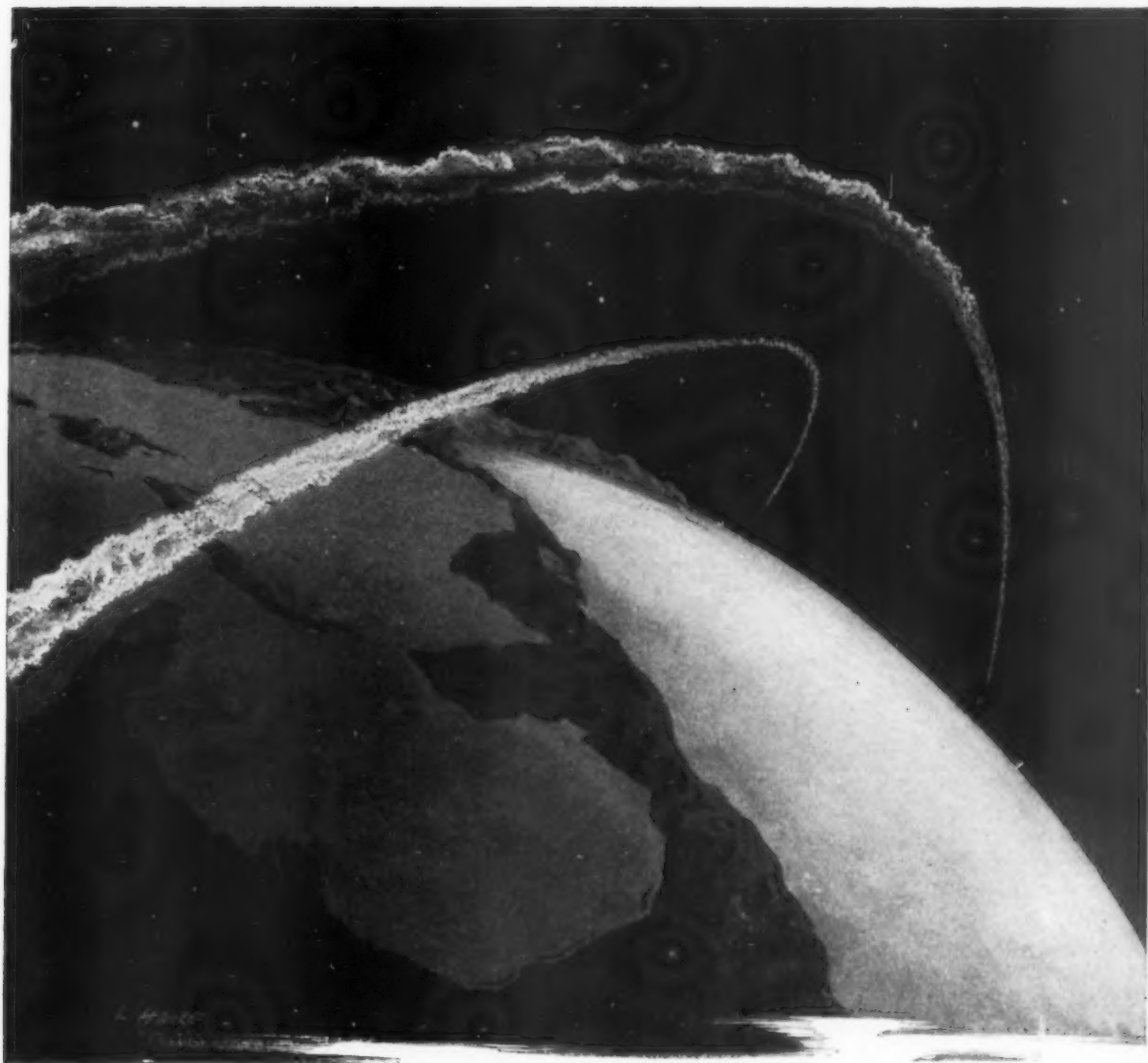
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# Air Cargo Carriers Replace Scheduled Lines at Lockheed

## New Service Firm to Handle Burbank Ground Operations

Lockheed Air Terminal, which will lose the major portion of its airline schedules this month, is moving to take up the slack with air cargo carriers.

First air freight line to locate at the Burbank airport is Slick Airways which has moved its Southern California terminus from Long Beach Municipal Airport and has leased a hangar.

Slick has taken a two-year lease on the 194 by 198-foot hangar and it may move its overhaul base from San Antonio in order to have it at the end of its trans-continental line.

In another of the B-29 type hangars, Lockheed has established an air freight depot. A new company called Airport Delivery Service has leased half of this hangar and has started operations providing ground service.

Organizers of the company are Walter Broderick, former factory transportation manager for the Lockheed Aircraft Corp., and Paul Williams, president of Domestic Air Express, a Los Angeles air freight forwarding firm.

The new company has a contract with California Eastern Airways and has done some part-time handling for Slick.

U. S. Airlines also is expected to make the Lockheed Airport its western terminus and a new contract carrier, Rapid Air Freight, Inc., starting up with three C-47's, is basing at the field. Rapid is headed by Maurice F. Roche, former Army flyer.

### Ground Functions Served

Airport Delivery Service is equipped to take over all ground functions except communications, according to Broderick. Office space is made available in the hangar, however, for communications equipment and desk space for lines using the service.

"We have full equipment to load and unload any type of air cargo," said Broderick. "We have experienced personnel on duty 24 hours a day, seven days a week and we can take over the whole job including the checking of manifests and waybills."

For the present, Airport Delivery Service has a contract with a trucking company for pickup and delivery, but it will operate its own trucks as soon as it can obtain delivery of them, Broderick said.

The company's aim, Broderick said, is to provide a fast, direct delivery service whereby cargo coming in on any plane arriving by 12 noon is delivered the same day and cargo received at night is delivered for the start of the business day.

Lockheed has not determined what airport policies it will pursue after the airlines move their operations offices and the majority of their flights to Los Angeles Municipal Airport, but it would prefer to continue it as a commercial airport. This fits in with its own flight

program because the planes it builds are of similar type.

On the other hand, R. V. Burns, manager of the terminal, said Lockheed had on hand applications for more than 300,000 square feet of space from personal plane companies seeking to establish service facilities at the airport. So far none has been accepted.

## Justice Dept. Uses Air for Deportation

Non-scheduled air carriers have been used by the U. S. Department of Justice's Immigration and Naturalization Service in the deportation and repatriation of aliens to Latin American countries, and the chances are that the use of the airplane will be increased in this work, it was learned last week.

Several hundred aliens have been moved to points in the West Indies, the Latin American countries and to points along the Mexican border. In addition, three trips have been made to Lima, Peru. There is a possibility that overseas trips may be made.

Non-scheduled carriers used by the immigration authorities were Winged Cargo Inc., and Lone Star Air Cargo Lines, Inc. More may be used in the future.

"Officials of the Service favor this method of transportation in numerous situations because of the speed and efficiency with which these movements can be effected, entailing as they do, a minimum use of official personnel," said Eugene M. Culp, acting special assistant to the Commissioner. He added that officials "are prone to use air transport facilities wherever available at a cost comparable to the cost of moving aliens by rail."

The possibility of using air transportation to deport aliens overseas is being studied in connection with the scheduled deportation of 250 Javanese during December.

### Standard and PAC Sign Contract

Standard Air Cargo, operating a non-scheduled passenger and freight service between San Diego and New York via Kansas City and Chicago, has entered into an agreement with Pacific Airmotive Corp. for engine, propeller and instrument overhaul and repair on the company's C-47's, according to an announcement by S. B. Craft, general manager of Standard.

### Trans-Luxury to Move Offices

Trans-Luxury Air Lines, non-scheduled carrier, will move its main office and maintenance shops from New York to Oakland as soon as hangar space is available, according to Roderick Ross, superintendent of operations.

## CAB Lists Seven More Non-Scheduled Lines In Show-Cause Action

Seven more non-scheduled air carriers have been ordered by the Civil Aeronautics Board to show cause why they should not cease and desist from engaging in scheduled air transportation in alleged violation of the Civil Aeronautics Act.

The latest group of carriers named were: Skyline, Inc.; Intercontinental Air Transport Co.; Trans-Tropic Airlines; Union Southern Airlines; Universal Airlines, Inc.; Air Freight, Inc. and Willis Air Service, Inc.

Following issuance of similar orders against five noncertificated carriers on Oct. 23 (AMERICAN AVIATION, Nov. 15), the board later initiated a procedure whereby these carriers may settle their cases in the form of a "consent decree." This would obviate the necessity of holding hearings in each case. The carrier, upon signing the consent decree, would be permitted to resume non-scheduled operations under the terms of the board's exemption order.

As this was written, one of the carriers named in the first group—American Export and Import—had indicated its intentions of signing the consent decree.

The American Air Export and Import Company (AAXICO) has been ordered by the Civil Aeronautics Board to cease and desist from any operations which constitute scheduled air transportation. The order was issued by CAB without a hearing and with the consent of the non-certificated carrier.

The Board issued a finding that AAXICO had been exceeding the limits of the Non-Scheduled Exemption Order (Economic Regulation 292.1) in operating as a scheduled carrier without a certificate of convenience and necessity and without an air carrier operating certificate. Monthly compliance reports are required of AAXICO until March, 1947.

AAXICO has also applied, in Docket 2665, for a temporary or permanent certificate authorizing scheduled mail, passenger and property service between Newark, N. J. and Atlantic City, a route it had been flying in non-scheduled service.

The carrier also filed with the Board a proposed plan listing the operations it intends to conduct under the Non-Scheduled exemption order.

Observers believe that AAXICO's acceptance of the consent decree procedure for avoiding a full hearing may set the pattern for the eleven other similar cases now pending.

### Dallas Gets New Engineers

Baity Bartel and William Funk, both engineers, have joined the Dallas Aviation School staff. In the Navy Bartel undertook torpedo research, while Funk has done aviation research for Westinghouse Electric Corp.



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## Airfreight Association Lists Members' Ton-Mile Increases

Four of the five members of the Independent Airfreight Association, Inc. reported a total of 5,051,127 ton-miles during September and October, the Association has announced. Figures for the fifth member are not yet available.

All five members flew 4,000,000 ton-miles during July and August, which is 21% less than the reporting four flew the following two months. Substantial gains have been listed by all lines reporting.

Members of the organization are Flamingo Air Service, Inc., Flying Tiger Line, Slick Airways, Inc., U. S. Airlines and Willis Air Service, Inc.

## Rapid Air Freight Commences Nationwide Transport Service

November 15 saw the inauguration of load carrying operations of Rapid Air Freight, Inc., Los Angeles based new air freight carrier headed by Maurice F. Roche, former Army flyer.

Present operations involve DC-3's but plans call for future use of DC-4's. Rapid's existing system is aided by the development of country-wide division stations which will aid in the ground handling of cargo.

Other members of the new non-scheduled carrier are Orval R. Buckman, executive v.p.; Henry P. Rosen, secretary-treasurer; Elmer Wall, chief pilot; and Wilbur Q. Mangold, superintendent of

## Willis Occupies Its New Hangar, Operations Base

The New York offices of Willis Air Service, Inc., Commander Airlines' operators, has been moved from 130 William St. to 258 West 31st St. Willis recently took over occupancy of its newly-constructed hangar and operations building at its home base, Teterboro, N. J.

Willis is also making plans for an air freight terminal building at Teterboro that will permit handling and sorting of air freight, chilling and handling of airborne produce, sea food and meats.

Commander's freight operations have mostly been to South American ports San Juan, Puerto Rico; Bogota, Colombia; and Caracas, Venezuela.

It also has contracts for airborne textiles and goods between New York and Chicago and New York and Dallas.

## Empire Adds New York Services

Empire Airlines, New York intrastate carrier, inaugurated Stateliner Beechcraft 18-C service between LaGuardia Field and Buffalo, Rochester, and Syracuse on Nov. 4.

Since its inception, Empire has flown more than 11,000 passengers and 2,500,000 passenger miles without a fatality.

maintenance. Wall formerly flew with Northwest Airlines and was a test pilot for Lockheed Aircraft Corp.

## Pacific Air Purchased By Two Ex-AAL Pilots

Control of Pacific Air Lines has passed from Earl Gilmore, California oil man and his associates to George Tompkins and T. D. Harvey.

Tompkins and Harvey, both ex-American Airlines pilots, have taken over management and ownership of the air carrier as president and vice president respectively.

According to T. W. Simmons, California oil man and one of the ex-owners of the organization, the former holders of Pacific stock had taken a loss in getting out from under the load of the company.

Pacific is now flying four trips daily between Los Angeles and San Francisco, making stops at Stockton, Modesto, Fresno and Sacramento. A non-stop flight between the two major terminals was begun Nov. 1, continuing on to Portland and Seattle on a contract carrier basis.

## Payne Quits Air Transport Operators for Cal-Eastern

Howard Payne has resigned as president of the Air Transport Operators, association of West Coast non-scheduled carriers. He has joined the sales department of California Eastern Airways which previously withdrew from the group.

Cal Eastern has elected to play a lone hand in its application for certification and the company's president, J. J. O'Brien, recently took occasion to publicly announce it was affiliated with no organization.

At the time the association was organized Payne was with the United States Aviation Corp. He has been succeeded as president of the Air Transport Operators by Harold F. Brown, president of the United States Aviation Corp.

## National Air Cargo Quits

National Air Cargo, non-scheduled carrier operating out of the Los Angeles Municipal Airport, has suspended operations, and, following a meeting of creditors, the company's four C-47's were turned over to the Los Angeles Retail Credit Association to sell.

Stanley Jackson, who was president of National Air Cargo, has moved to the Ontario, Calif., airport where he is organizing a new company called Royal Air Service. He plans to take over continuing contracts held by National Air Cargo, using leased equipment.

## POA Transports Philippine Group

Pacific Overseas Airlines last month transported nearly a hundred staff members, personnel, and 10 tons of office supplies of the Philippine War Damage Commission from Washington to Manila. The transfer was completed in three DC-4 flights, via the international airport, Ontario, Calif., Honolulu, Kwajalein, and Guam. POA is operating a fleet of 19 DC-4s on a charter basis and for the Air Transport Command in the Pacific area.

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# SPEEDBIRD PROGRESS REPORT

APRIL 1, MAR. 31,  
1940 TO 1941



19,379

596.33

448.10

32,987,441

25,465

8,375,290

## PASSENGERS CARRIED

For every two *passengers* carried by BOAC in 1940-41, Speedbirds in 1945-46 transported more than fourteen . . . "Over the Atlantic . . . and Across the World."

## MAIL AND CARGO TONNAGE

*Mail* tonnage went up by 381.9 per cent. And the volume of *cargo* and excess baggage increased more than elevenfold.

## PASSENGER MILES FLOWN

Speedbird *passenger miles* flown soared from just under 33 million to not far short of 300 million, nearly a nine-time increase.

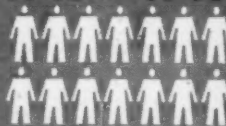
## NET ROUTE MILEAGE

Speedbird *route mileage* more than doubled. With recent additions, the total today is around 70,000 miles, linking up five continents.

## TON MILES CAPACITY

Up more than 700 per cent was BOAC's *ton miles capacity*. And even more spectacular expansion will come as BOAC puts into service the new Tudor Speedbirds and the advanced Boeing double-decker Speedbird Stratocruisers.

APRIL 1, MAR. 31,  
1945 TO 1946



143,930

2,873.62

5,166.67

295,839,835

65,714

67,374,802



To measure Speedbird Service merely by statistics would be like judging a man's character simply from his height and weight. Behind BOAC is another, more human story . . . of tradition and experience going back 27 years . . . of shared effort and pioneering achievement . . . of confidence and enthusiasm—all making for perfection through performance, on the ground and in the air.

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BRITISH OVERSEAS AIRWAYS CORPORATION

## SPEEDBIRD SERVICE...Over the Atlantic...and Across the World

Copyright 1946 British Overseas Airways Corp.

## The Airlines Started This Advertising Fracas, Southern Pacific's Ad Man Says

It now develops that the airlines were the culprits who started all this business of using advertisements which compare one form of transportation with another, and if these airlines like to dish it out, "they should be able to take it."

At least this is the claim made by F. Q. Tredway, general advertising manager of the Southern Pacific, the railroad which has been running newspaper ads entitled, "A Short Course in Railroad—For Airline Executives," and "Are Railroads Necessary?"

In a letter commenting on recent AMERICAN AVIATION editorials ("A Railroad Short Course," Oct. 1, and "The Friendly S.P.," Nov. 1), Tredway says that if he was "the advertising manager for an airline I could be resourceful enough to promote the service without referring specifically to the railroads in my advertising and I think I could do a good job of it."

"The airlines have been dishing it out to the railroads for a good many years in their advertising. To mix up a couple of old saws, people who live in glass houses shouldn't throw stones, and if the airlines like to dish it out they should be able to take it."

"Personally, I like to carry on our advertising in a positive, affirmative and constructive way, as compared with the negative variety, and without specifically mentioning our competitors. I hope to keep on that way unless our airline friends get too tough."

Tredway gives the following background on the ad addressed to airline executives: "For many years the air interests, which includes both manufacturers and the airlines themselves, have been trying to sell their wares by making comparisons in their advertising with rail service, although it has generally been considered unethical in the advertising world to make direct comparisons between one service and a specific competitor. Earlier advertising was full of such phrases as 'the crawling train below,' 'the noisy train with dirt and cinders,' and so forth."

"Later, the airlines started advertising making direct and specific comparisons of air fares and rail fares plus Pullman, despite the fact that the railroads have many fast and comfortable coach trains with low coach fares and despite the fact that the railroads, particularly the western lines, make very substantial reductions for round trips. When errors are made in quoting railroad fares they are always on the higher side."

"The last straw which broke the camel's back was a couple of months ago when one of the national airlines distributed cards in various cities along our lines comparing one-way rail fares plus Pullman with airline one-way fares with the flat statement that you save money on the basis of fares. Nothing was included as to the saving of time, saving of meals or the savings which the airlines are fond of talking about, such as the money gained by savings of time based on the hourly value of an executive's time, depending on his salary bracket. Since the rail fares on the basis of round trips are lower, we thought this advertising was dishonest, and that occasioned our ad addressed to airline executives."

Tredway also defends the railroad's comparison of day coach travel with air travel. "Our Daylight is one of the finest trains in the world," he claims. "It is streamlined with the very latest modern coaches which have fine double-piled foam rubber cushions, adjustable to several positions. The train carries a tavern car, two diners and is the fastest train between Los Angeles and San Francisco. You travel in just as much comfort as you do on the plane. In fact, I think you are much more comfortable on the train. I say this having tried the planes to Los Angeles in times of emergency . . . So aside from the question of speed, there is no point where the train is inferior to the plane and since the train and planes are competing in the daytime I see no reason why the higher fare plus the cost of a bed should be included by the airlines in making their advertising comparisons with railroad fares."

## Western Air Cuts Plane Orders in Half

Reacting to revised projections of traffic trends, Western Air Lines has reduced its new plane orders with Douglas Aircraft Co. and Consolidated Vultee Aircraft Corp. by 50%, Leo M. Dwerlkotte executive vice president, revealed last month.

The orders have been cut from 10 to five DC-6's and from 20 to 10 Convair 240's. Western's original Douglas order had been for five DC-6's, but was increased to 10 in anticipation of the Mexico City route, service over which has been delayed by breakdown of U. S.-Mexico negotiations.

In addition to cutting its new plane commitments in half, Western has sold one of its DC-4's to Waterman Airlines. The plane is one of five new models purchased for the Denver-Los Angeles run. The airline is reported to have netted a \$75,000 profit on the sale.

Western is reducing schedules on all routes except Los Angeles-Salt Lake City because of diminishing load factors. It is taking off three schedules between Los Angeles and San Francisco, and one each between Los Angeles and Denver, Salt Lake City and Great Falls, Los Angeles and San Diego, Denver and Billings.

## S. A. Traffic Division Organized by Braniff

Braniff Airways has created a Latin American traffic division for its new international routes and has simultaneously revised its domestic traffic organization.

W. R. Beattie, now in his 10th year with the company, has been named to the newly created post of general traffic manager, Latin American division, with headquarters in Dallas until South American facilities are established.

Paul D. Niles, sales promotion manager, has been appointed general traffic manager of the domestic division. Douglas Wood, formerly director of traffic for the eight-city central division, will succeed Beattie as manager of agency, interline, and foreign sales.

With these changes, the western sector cities between Denver and Memphis were incorporated into the company's central division under R. T. Phinney, based in Denver. Dallas, Ft. Worth, and Wichita Falls were transferred to the southern division with headquarters in Austin under R. H. Burck.

Inauguration of Braniff's international service is pending completion of arrangements with the individual countries.

## Stringer Leaves All American

Harry R. Stringer, vice president-traffic, mail, advertising and public relations, has resigned from All American Aviation. Stringer, who joined the company in 1939, said he had no immediate plans for the future.



**Study Aviation—** This committee of California legislators made a 4,400-mile aerial fact-finding tour of the state in a chartered Western Air Lines plane and conducted hearings in 43 communities to determine what aviation legislation should be presented to the legislature when it meets in January. Left to right: H. K. Fridland, district airport engineer, Civil Aeronautics Administration; Senator R. R. Cunningham; Tom Murphy, assistant to the president of Western Air Lines; Assemblyman Clyde Watson; Stewardess Kaly Murphy; Frank J. Walters, attorney; Assemblyman Ernest E. Debs, chairman of the committee; Senators Byrl R. Salzman and Charles Brown; Assemblyman J. O. Crichton and L. A. McMillan; and C. J. Hand, chairman of the airport planning section of the Civil Aeronautics Administration.



**American  
Aviation**

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keeping them informed is our business*



OVERSEAS AIR LINES — MARINE BASE

## Western Air Lines Devises Plan to Speed Reservations Work

Western Air Lines' Los Angeles reservations office has successfully conducted tests with a new method called the "bullen" system, and the airline plans similar change-overs in San Francisco, Denver, and San Diego.

The new method cuts the time necessary to make each reservation approximately in half. It utilizes Kardex files, special lightweight telephone headsets, and a novel telephone turret system worked out by the Southern California Telephone Co.

Space information on all flights for a month ahead is continued in Kardex files spread out in a large room where many people can easily move around. The files line the room, resting on specially-built tables with writing space in front, and with a 10-line telephone turret built into each table.

As a call comes in, a reservation clerk picks it up by plugging his headset into any nearby turret. After finding out what the customer wants, he presses a "hold" button and moves over to the particular Kardex drawer containing the flight information desired. He can then plug his headset into the nearest turret and pick up the "hold" call from the other table. The call is handled in an average of one and a half minutes as compared with three minutes under the old system.

## Pan-Am Stops at Athens and Naples Authorized by CAB

One year exemption orders authorizing Pan American Airways to make full traffic stops at Naples, Italy, and Athens, Greece, have been issued by the

## UAL Tries No Reservation System

United Air Lines is trying out a no reservations policy between Portland, Ore., and Seattle, Wash. When a local ticket between the two points is purchased, the agent at the ticket counter checks off a seat as sold, and when the available space in a flight is filled no more tickets on that trip are sold. Primary aim is to reduce the load in reservations.

## Three More Lines Moving To Willow Run in December

Three more of the seven scheduled air carriers serving the Detroit area planned to move their operations from Detroit Municipal to Willow Run around Dec. 1. They are: United Air Lines, Northwest Airlines, and Eastern Air Lines.

Meanwhile the Airlines Terminal Corp. was scheduled to meet early this month to complete the work of taking over Willow Run airport leases held by Pennsylvania-Central Airlines as another step in inaugurating the first consolidated terminal service. While the airlines will continue to operate on an individual basis for some time after the transfer, consolidation of services will follow on a gradual basis in accord with a plan to be recommended by a special committee.

It is understood that ramp services will be combined first. Later the consolidation may be extended to a point that even ticket and reservation services will be handled by the Airlines Terminal Corp.

Civil Aeronautics Board today. The orders accompanied a supplemental opinion on the PAA North Atlantic amendment case (Docket 2076).

The Board also denied PAA's petition for authority to serve Rome instead of Naples.

## Airline Personnel

### Administrative

W. R. Campbell, regional traffic manager for Trans-Canada Airlines has announced the following new district traffic managers: A. A. Stapells, Cleveland; P. B. Mellon, New York; J. J. Robinson, Toronto; J. D. Roberts, Ottawa, and J. T. Moore, Winnipeg.

Granville B. Bourne has been named to head Panagra's new tour development program. Bourne operated his own travel agency in Nashville before the war.



Piegras

Ames

Ross

A. D. Piegras, head of Northwest Airlines' accounting division, has been named comptroller of the Orient region of the company.

Robert H. Ames, former advertising agency executive, has been named advertising manager of PCA.

Bill Ross, ex-news editor and war correspondent who was cited for outstanding performance of duty with Marines at Iwo Jima, is the newly appointed news director of PCA.

### Reservations and Sales

John B. Boddie has been made regional manager of reservations and ticket offices in Los Angeles for American Overseas Airlines.

John E. Cook resigned as general traffic manager for Continental Air Lines.

John Howitt, formerly of American Airlines, and Robert H. Johnston, formerly with Northwest Airlines, are now traffic representatives for Southwest Airways in Los Angeles.

## SUMMARY OF U. S. DOMESTIC AIR TRANSPORT OPERATIONS FOR August, 1946

Compiled by American Aviation Publications from Official C.A.B. Data.

AIRLINES	TOTAL OPERATING REVENUES	PASSENGER REVENUES	MAIL REVENUES	EXPENSE REVENUES	FREIGHT REVENUES	TOTAL OPERATING EXPENSES	AIRCRAFT OPERATING EXPENSES	GROUND & INDIRECT EXPENSES	OPERATING REV. PER REV. MILE	OPERATING EXP. PER REV. MILE	NET INCOME BEFORE INCOME TAX	NET PROFIT ON LOSS	TOTAL ASSETS	
All American	\$ 66,134	\$ 65,121	\$ 799	\$ 75,420	\$ 36,640	\$ 38,780	\$ 41.1-1	\$ 46.9-4	\$ -29,890	\$ -29,890	\$ 2,459,791			
American	6,510,568	5,780,606	213,221	151,653	180,040	6,125,363	2,411,052	3,694,310	112.9-6	106.2-6	291,369	190,000	131,120,691	
Boeing	1,089,392	1,026,565	30,035	15,553	6,570	1,008,303	446,480	561,822	98.5-6	91.2-6	89,464	55,464	11,653,487	
Caribbean	41,908	32,945	1,256	1,029	40,668	18,160	109.3-6	106.6-6	470	470	347,330			
C & S	736,036	698,372	17,183	16,652	845,295	356,139	93.6-6	107.5-6	-109,957	-109,957	8,996,505			
Colonial	359,965	332,982	10,947	1,108	300,060	116,150	98.5-6	82.1-6	84,724	84,724	3,381,199			
Continental	598,526	434,291	54,162	2,295	435,240	182,851	88.5-6	77.3-6	60,662	35,295	1,004,297			
Delta	1,011,771	953,743	32,661	24,287	948,163	434,961	93.1-6	92.6-6	83,684	49,415	6,313,165			
Eastern	3,789,314	3,516,864	94,169	93,470	3,018	2,922,173	1,659,616	103.1-6	79.9-6	898,311	499,311	34,330,990		
Hawaiian	312,359	270,359	909	8,604	18,839	240,573	103,853	136,679	105.4-6	72,321	2,369,012			
Inland	171,726	123,152	45,263	979	129,822	55,427	99.7-6	75.4-6	41,705	30,839	76,828			
MCA	447,657	395,908	83,397	3,237	379,374	165,851	95.3-6	80.8-6	66,371	37,504	2,730,793			
National	482,728	423,528	34,784	5,453	728,910	316,469	102.4-6	85.7-6	151,957	94,213	10,117,869			
Northwest	566,025	521,786	36,019	5,454	534,300	248,339	285,961	128.0-6	120.8-6	24,941	24,941	3,858,189		
Northwest	2,280,105	2,062,039	81,348	40,124	1,853,526	809,273	1,044,253	118.1-6	98.6-6	369,299	225,795	15,805,601		
PAA	1,564,534	1,471,209	21,916	37,340	1,929,762	806,355	1,123,707	118.6-6	116.7-6	5,044	3,144	22,395,717		
Pioneer	51,173	29,379	20,967	553	86,528	39,726	46.802	84.5-6	-38,949	-38,949	717,177			
TWA	3,305,739	3,459,648	192,350	138,024	62,070	4,692,241	1,676,129	3,018,112	93.1-6	111.8-6	-680,339	-423,557	65,126,819	
United	6,125,353	5,484,157	302,935	198,438	84,486	5,266,426	2,047,169	3,239,257	100.5-6	1,015,647	633,647	55,433,186		
Western	1,190,785	1,080,762	33,228	13,000	6,794	1,003,194	417,578	585,576	147.8-6	128.8-6	138,648	138,648	10,511,575	
TOTALS	31,882,458	28,877,955	1,369,511	747,973	376,483	29,565,482	11,968,899	17,596,575	107.7-6	100.2-6	2,295,922	1,573,798	391,901,143	
						TWA's Revenues and Expenses for July, 1946								
TWA	4,422,852	3,662,109	195,126	136,901	63,008	4,988,717	1,835,379	3,153,337	95.2-6	115.2-6	-930,493	-340,367	67,091,070	

TWA's Revenues and Expenses for July, 1946

REVENUES  
&  
EXPENSES

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There was a time when students and alumni had football to themselves. Today, crowds of spectators testify that football belongs to everybody.

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## **AMERICAN AIRLINES**



# Airline Commentary

By ERIC BRAMLEY

## Latest Traffic Reports

We had the pleasure recently of riding from Nashville to Oklahoma City on an American Airlines trip piloted by Capt. Jim Knight . . . Capt. Knight is another of these pilots who believes in entertaining the passengers by sending flight reports back through the cabin with verse and words of wisdom on them . . . Here are a couple of examples: Over Harrison Ark.—“Folks, there’s a story about Harrison, Ark., I always like to tell, for it was from here that Grandpaw Knight drove the old stagecoach to Eureka Springs before the turn of this century. This was a one day’s run for Grandpaw, but sometimes it took as many as three days during the spring thaws, with a little push power from the passengers. Tonight you’ll cover the same route in less than nine minutes without ever getting out of your seat, and our DC-4s cover it in less than seven. Next year our DC-6s will master the old trail in five and a half minutes and in the not-too-distant future our Rainbows will speed you over old Grandpaw’s route in less than four minutes. Amazing what this transportation business has come to, and in just three generations” . . . Over Walnut Ridge, Ark., he wrote: “Walnut Ridge—ye graveyard of surplus airplanes, where even at night you glimpse the glitter of the taxpayer’s moola mired in the mud to the tune of \$1,200,000,000 seemolians” . . . Anyway, “El Capitan” Knight (as he signs himself), First Officer Jack Robinson, and Stewardess Chris Spangler made our trip very enjoyable, and we can report that they all did a fine public relations job . . .

Of course you’ve never had to use them, but you know about the burp cups which the airlines carry under the seats for airsick passengers . . . Well, it seems that one airline ran short of cups, so it hustled out and bought some similar containers from a local ice cream firm . . . Needless to say, the airline was slightly nonplussed to find inside the cover the following inscription: “If you like our product—thank you, come again!” . . .

Capt. C. G. “Clancy” Mead, Jr., of Pan American Airways, comes through with a good story . . . Last month he was training PAA student captains at MacArthur Field, Long Island . . . “A student captain had just made an almost three-point take-off in the Constellation we were working in,” says Capt. Mead. “After the subsequent landing, we taxied back to the corner nearest the tower for the next take-off. Just before we asked for the take-off clearance the tower operator gave forth with a most startling message: “Clipper 60, this is MacArthur tower. Mr. Robert Gross, president of Lockheed Aircraft Corp., is here in the tower and has asked me to tell you that the proper speed to take the nose wheel off the runway is 70 mph” . . . Capt. Mead remarks that “I believe the incident is the first time in modern aviation history that the president of an aircraft company has given the type of conscientious field service the above entails” . . .

Memo to the operators of the restaurant at Cleveland Municipal Airport: Please instruct your people to be a little less obvious about putting the bite on the poor air traveler . . . One of our men had to do a bit of waiting in the Cleveland terminal the other day, and he killed some time having coffee in the restaurant . . . In writing the check for the cup of coffee, the waitress said: “Are you a passenger or a field employee?” . . . In admitting that he was a passenger, our man, who can be surly at times, wanted to know if it made a difference in the price of coffee . . . “Oh yes,” was the cheerful answer. “It’s a dime if you’re a passenger, but only a nickel if you work here” . . .

Ah, the dear old railroads—always thinking up something new . . . During a recent visit in Minneapolis, we picked up the newspaper and came across an advertisement of the Great Northern Railway . . . The ad says that if you want to save money you’ll travel by rail, and then it prints a list of one-way air fares as compared with one-way coach fares . . . “Here are real figures for thrift-minded travelers as to comparable accommodations and costs,” it says . . . The inference, of course, is that if you have to sit up on an airplane you might as well sit up on a train . . . Pullman tariffs aren’t listed in the ad . . . “Rail travel is comfortable, safe and on regular, all-weather schedules,” the Great Northern proudly proclaims . . . Any time air travel is comparable to rail coach we will quit riding the airlines . . . You may save \$34.81 traveling by coach from Minneapolis to Seattle, but how long does it take (the ad doesn’t say), how many meals do you buy, how many suits do you have to have cleaned at the end of the trip, how many cinders do you have removed from your eyes and how long does it take to catch up on your sleep? . . . We suggest that the GN try another angle.

Colonial Airlines—October: 16,012,036 express pound miles flown represented 227% increase over year ago and 55% increase over September, 1946. Passenger traffic showed seasonal decline from previous month, but was 19.1% higher than October, 1945. A total of 12,536 passengers were carried 3,689,784 passenger miles. Mail pound miles totaled 12,206,281, a 3% decrease from September, but 28% above same month year ago.

Chicago & Southern Air Lines—10 months through October: 296,000 revenue passengers and 117,893,000 revenue passenger miles, up 88% and 67%, respectively, over same period last year when passengers totaled 158,255 and revenue passenger miles 70,534,500. October passengers totaling 33,900 represented 56% increase over 21,778 a year ago, while 13,000,000 revenue passenger miles were three and a half million higher than October, 1945.

Eastern Air Lines—October: 400,419 pounds of air express and 106,779 pounds of air mail compared with 320,096 and 72,586 in September.

Hawaiian Airlines—Nine months through September: 182,256 passengers were 80% more than 113,816 in same period 1945.

Mid-Continent Airlines—Nine months through September: 185,045 revenue passengers and 3,780,155 revenue passenger miles were gains of 78% and 68%, respectively, over 103,976 and 2,273,994 in same period a year ago.

United Air Lines—October: 103,187,600 revenue passenger miles, up 82% over 56,575,380 same month 1945; cargo ton miles of 1,336,011 were up 245% over year ago and 35% over previous month (692,681 ton miles were air express and 643,330 air freight); air mail went up 29% over September to 766,390 ton miles.

## Transport Notes

Foodstuff Freighter—American Airlines helped Alaskans to alleviate the food shortage resulting from the West Coast shipping strike by hauling food stuffs to the territory in four DC-4’s.

Exports 3-to-1—A ratio of three-to-one of exports over imports has been noted by the Air Express division of the Railway Express Agency in its recent report of international business which noted also that September, 1946, trade was up 59.6% over September, ‘45.

Woman’s World—British Overseas Airways Corp. has placed flight stewardesses on the route between New York and London as has Pan American-Grace Airways on its South American flights.

Full Fleet—With the delivery of the last of 11 DC-6’s acquired over a period of months, Northwest Airlines announced the anticipated full complement of Douglas transports were in operation over its system.

Million Miller—American Airlines flew more than a million cargo ton-miles during September for the first time since it established an air cargo division.

Mail-Order Help—Sears-Roebuck mail order service has been the largest contributing factor in Continental Air Lines’ July record of operating more freight ton-miles than air express ton-miles, the figures being 6,434 to 6,358.

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# High Army Officials Support POA Route Consideration Plea

## Generals Say War Department Compulsion Restrained Carrier

Sometime within the next few weeks the Civil Aeronautics Board must decide, with the threat of court action in the background, whether Pacific Overseas Airlines, after the record in the Hawaiian case had been closed for months, will be permitted to submit proofs and evidence in support of its application for an air carrier certificate between Los Angeles and Honolulu.

First the Board must decide whether POA, as the opinion in the U. S. Court of Appeals, District of Columbia stated, was prevented from filing its application earlier due to the "compulsion of another agency of the government."

If the Board decides such was the case, then POA probably will be permitted to submit the evidence which it believes entitles it to the route certificate between Los Angeles and Hawaii.

Following several weeks of legal skirmishing, POA got a brief "day in court" Nov. 18 when Chairman James M. Landis of CAB, obeying a court order, heard testimony on the reasons why POA was prevented from filing its application earlier.

High Army officials—Lt. Gen. Harold L. George, former commanding general of the Air Transport Command and Brig. Gen. Gordon P. Saville, his deputy commander—testified in POA's behalf. Gen. George said that the prohibition exercised on POA against filing a route application in the Pacific and Hawaiian cases was as compelling as if "Gen. Eisenhower ordered me to do something."

Joseph Brent, chairman of the board of POA, testified that he had gone to then CAB Board Chairman L. Welch Pogue before July 1, 1946, to determine what the chances were of POA getting into the case.

Brent said Pogue discouraged him on the grounds that CAB procedures were so far along that he doubted the company could be granted permission to become a party to the case. The hearings and oral argument had been held and the case was before CAB for decision.

On July 1 the board ordered re-opening the case for reargument on that portion of the record relating to the need for an additional carrier between Los Angeles and Honolulu. Then it was that Samuel E. Gates of Douglas and Proctor, counsel for POA, took steps to get "POA off the hook," as far as the Army's prohibition was concerned. Gates, formerly chief of organization planning for the ATC, went to his old chief, Gen. George and got the release which had prevented the company from filing an application earlier.

### POA Then Filed Application

POA then filed the application and asked to have the case consolidated with

the Hawaiian proceeding. The Board denied POA's petition to become a party to the case. Appeal was taken to the U. S. Court of Appeals and sometime later the court handed down the opinion which remanded the case to the board.

During the period from middle August until Nov. 18, a flurry of motions and petitions were filed by POA. Some of these are still to be passed upon by CAB in making its decision as to whether POA shall now be made a party to the case.

Chairman Landis, at the close of the special hearing, threw an element of surprise into the proceeding when he announced that the board authorized him to state that the President had concurred in the board's decision to reopen the case.

## CAB Approves IATA 'No Show' Agreement

The Civil Aeronautics Board has issued an order approving certain agreements made by members of the North Atlantic Traffic Conference of the International Air Transport Association which include the imposition of penalty charges on "No Show" passengers and the carriers' plans for the institution of experimental air freight services.

The agreements are listed in board records as Agreements CAB R-1 through R-4. The penalty charges for "No Show" passengers provide that the airlines may charge a passenger 25% or \$50, whichever is less, of the cost of the fare from point of departure to the first stop en route for failure to cancel the reservation before flight time. Thus, if a passenger had a ticket for passage from New York to Cairo, with a stop-over privilege in London, the penalty would apply only on the portion of the cost of the ticket relating to the New York-London fare.

Another conference resolution approved permits the airlines to inaugurate international freight services on an experimental basis, under individual tariffs. In cases where the carrier is not required by law to file a tariff with its own governmental regulatory agency 30 days before instituting service, the carrier shall give notice to other carriers 15 days in advance.

A third resolution provides that all notices pertaining to existing services, including revisions of tariffs and schedules for the carriage of passengers and property, shall be filed with the secretary of the North American conference who in turn will transmit the information to all other conference members.

The agreements remain in effect until Feb. 28, 1947—the termination date of the board's approval of conference relationships.

## Protection of Regular Carriers in Alaska Recommended to CAB

Immediate termination of present exemption orders involving non-certificated carriers operating in Alaska has been recommended by Raymond W. Stough, director of the Civil Aeronautics Board's Alaska bureau.

Stough's recommendations, made in a report based on all phases of Alaskan civil air operations, generally propose to protect the certificated carriers who have fulfilled the obligations of their certificates, restrict and possibly discipline those that have not, and eliminate entirely those operating in open violation of the Civil Aeronautics Act.

The report stated that as of Aug. 31, 1946, there were 38 Alaskan applicants for new certificates. Of these, 17 were authorized to operate under the general exemption order, seven were authorized to operate under individual exemption orders, and nine were not operating.

Making allowances for the inherent geographic differences between air operations in the U. S. and in Alaska, Stough suggested that the CAB should recognize the classification of service which actually exists in the Territory and should sub-classify Alaskan air carriers as scheduled and irregular.

Among the specific recommendations were that the CAB:

Exempt from Section 401(a) of the Act persons seeking to engage exclusively as irregular air carriers.

Require scheduled Alaskan air carriers to file operating schedules with the Board within 60 days after the date of the Board's order.

### Harmonize Certificates Operations

Bring certificates and actual operations into harmony by directing each scheduled carrier to show cause why any point named in its regular-route certificate but not in its operating schedules should not be transferred to its irregular-route certificate.

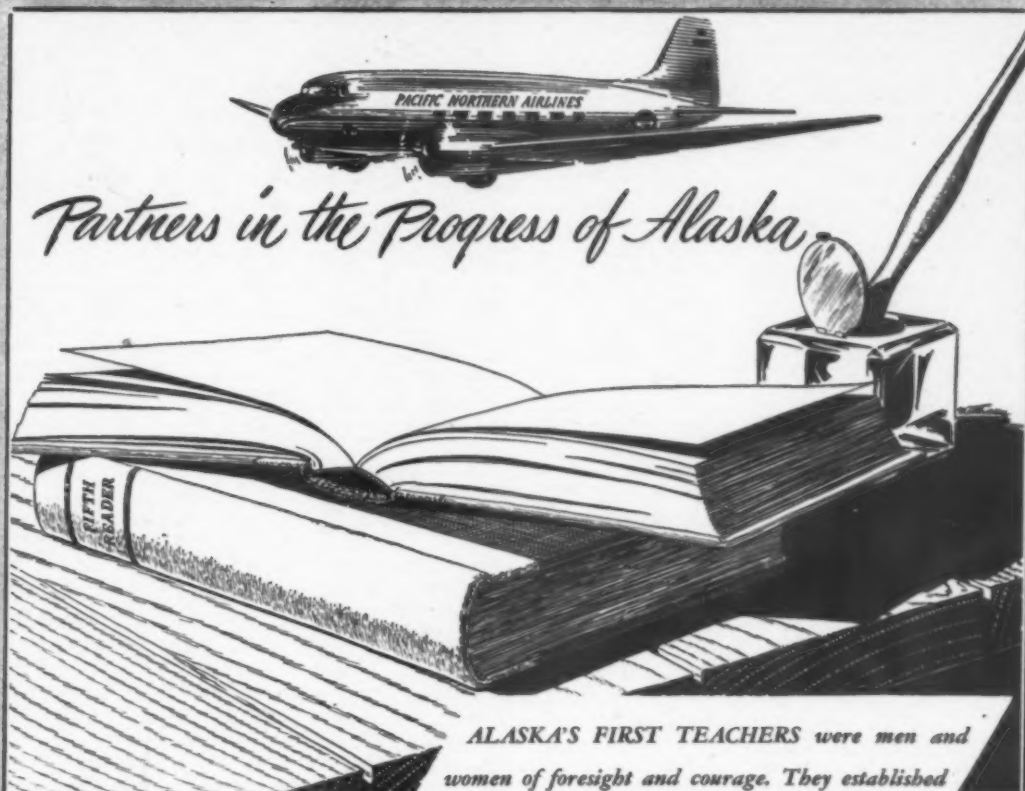
Change the present prohibition against operation by irregular-route certificate holders between points named in the regular-route certificates of another carrier, so as to apply only to trips between points named in operating schedules filed with CAB.

Define "casual, occasional and infrequent" as used in Section 292.2 of the Economic Regulations to mean not more than two trips per month, except where carrier can demonstrate that a greater number of trips were conducted as a result of unusual or non-recurring conditions, or pursuant to arrangements with the carrier conducting scheduled service between such points.

Enter an appropriate order to make clear that the sub-classification of Alaskan air carriers recommended does not remove irregular operations in the Territory from the application of Part 42 of the Civil Air Regulations governing non-scheduled operations.



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Juneau ... Anchorage ... Kodiak ... Seattle  
KARL K. KATZ, General Traffic Manager

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# CAB Proceedings

(A Summary of Applications Filed, and Future Actions of the Civil Aeronautics Board.)

## Calendar:

Dec. 2—Second Section, Air Freight Case Hearings. (Docket 810 et al.) Postponed from Nov. 25. Washington, D. C.

Dec. 4—Briefs due in the Great Lakes Area Case (Docket No. 535 et al.) Postponed from Nov. 18.

Dec. 4—Oral argument on the Pan American Airways-Pan American-Grace Airways Through Flight Agreement. (Docket 2423). 10 a. m., e. s. f., Room 5042, Commerce Building.

Dec. 9—Briefs due in the Universal Air Travel Plan Investigation (Docket 1939).

Dec. 9—Oral argument in the Cincinnati Case. (Docket 221 et al.) 10 a. m., e. s. f., Room 5042, Commerce Building.

Dec. 16—Hearing in Pan American Airlines' Trans-Atlantic Rate Case. (Docket 1706). Tentative.

Dec. 18—Oral argument in the Braniff Airways, et al., Route Consolidation Case. (Docket 1154 et al.) Postponed from Dec. 2. 10 a. m., e. s. f., Room 5042, Commerce Building.

Dec. 26—Exhibits due in the Additional Service in Florida Case. (Docket 997 et al.).

Dec. 26—Exchange of exhibits in Freight Forwarder Case (Docket No. 681 et al.) Postponed from Nov. 15.

Jan. 1—Deadline for exhibits in the Caribbean-Atlantic Airlines' Caribbean Service Case. (Docket 2246).

Jan. 5—Rebuttal exhibits due in the Additional Service in Florida Case. (Docket 997 et al.).

Jan. 10—Rebuttal exhibits due in the Caribbean-Atlantic Airlines' Caribbean Service Case. (Docket 2246).

Jan. 15—Hearing on Caribbean-Atlantic Airlines' application for Caribbean routes. (Docket 2246). Examiner James S. Keith. Tentative.

Jan. 26—Hearing in the Additional Service in Florida Case. (Docket 997 et al.) Examiner F. Merritt Ruhlen. Tentative.

Jan. 27—Exchange of rebuttal exhibits in Freight Forwarder case (Docket 681 et al.) Postponed from Dec. 20.

Feb. 17—Hearing Freight Forwarder case (Docket 681 et al.) Postponed from Jan. 10.

## Applications:

Air Ambulance, Incorporated, Durham, N. C., for a certificate authorizing non-scheduled air transportation in ambulance and hearse service between

all points east of the Mississippi River. (Docket 2585).

Caribbean-Atlantic Airlines, Inc., for an exemption order authorizing transportation of persons, property and mail between San Juan and Borinquen Field, P. R. (Docket 2604).

Cavu Flying Service, Incorporated, 903 Marquette Avenue, Minneapolis, Minn., for a temporary certificate authorizing non-scheduled passenger and property service between Minneapolis and points in Canada and Mexico. (Docket 2605).

Challenger Airlines, Inc., 520 Felt Building, Salt Lake City, Utah, for a permanent or temporary certificate authorizing scheduled mail, passenger and property service over 1798 miles of routes between Salt Lake City and Las Vegas, Nev., Fresno, Calif., and Reno, Nev., and between Reno and Las Vegas. (Docket 2582).

Congressional Airlines, Inc., Room 605, 1129 Vermont Ave., N. W., Washington, D. C., for a permanent or temporary certificate authorizing mail, passenger and property service by helicopter over routes in Maryland, Delaware, Virginia, and the District of Columbia. (Docket 2587).

Eastern Air Lines, for an amendment to its certificate for Route 6 to add Gainesville, Ocala, and Tampa-St. Petersburg as additional intermediate points, and for a Miami-New Orleans route via Tampa-St. Petersburg, Panama City, Pensacola, and Mobile. (Docket 2578).

International Air Freight Forwarders, 2326 Buhl Building, Detroit, Mich., for a certificate authorizing air transportation as a freight forwarder over scheduled international lines. (Docket 2610); and over non-scheduled international lines. (Docket 2611).

Island Air Ferries, Inc., Bohemia, N. Y., for a permanent or temporary certificate authorizing scheduled mail, passenger and property service by helicopter from downtown Manhattan to New York's satellite airports, and shuttle service between the airports themselves. (Docket 2594).

Long Island Airlines, Inc., Southampton, L. I., N. Y., for a permanent or temporary certificate authorizing scheduled passenger and property service by amphibian aircraft between New York and Washington, D. C., Hyannis, Mass., Boston, Mass., and Albany, N. Y., all via various intermediate points. (Docket 2599).

National Air Freight Forwarders, 2326 Buhl Build-

ing, Detroit, Mich., for a certificate authorizing air transportation as a freight forwarder over scheduled domestic lines. (Docket 2608); and over non-scheduled domestic lines. (Docket 2609).

Julius E. Nervo, 222 "B" Street, Santa Rosa, Calif., for a temporary certificate authorizing scheduled mail, passenger and property service over 250 miles of routes within California. (Docket 2597).

Seaport Shipping Co. (A. J. Buckingham, d.b.a.), 1146 Dexter Horton Building, Seattle 4, Wash., for a permanent or temporary certificate authorizing air transportation as a freight forwarder over scheduled international lines. (Docket 2606); and over non-scheduled international lines. (Docket 2607).

Sea-Port Shipping Co. (M. H. Beach d.b.a.), Lewis Building, Portland 4, Oregon, for a certificate authorizing air transportation as a freight forwarder over scheduled domestic carriers (Docket 2583); and over scheduled international lines. (Docket 2584).

Southern Bus Lines, P. O. Box 1871, Alexandria, La., for a temporary exemption order authorizing scheduled mail, passenger and property service between Shreveport, La., and Little Rock, Ark., and/or between Monroe, La., and Little Rock. (Docket 2586).

Sun Transporters, Inc., Empire State Building, 33rd and Fifth Avenue, New York, N. Y., for a permanent or temporary certificate authorizing air transportation as a freight forwarder over scheduled international airlines. (Docket 2579); and over non-scheduled international lines. (Docket 2580).

Transcontinental & Western Air, Inc., for consolidation of its Routes 2 and 58 into a single route to be known as Route 2. (Docket 2581).

Universal Air Freight Corporation, 40 Rector Street, New York, N. Y., for a certificate authorizing operation as an air freight forwarder over scheduled international airlines (Docket 2600); over non-scheduled domestic lines. (Docket 2601); and over non-scheduled international lines. (Docket 2602).

Westland Airlines, Inc., 609-610 San Angelo National Bank Building, San Angelo, Texas, for a permanent and/or temporary certificate authorizing scheduled and non-scheduled mail, passenger and property service over a 170-mile route between Marfa, Texas, and Chihuahua, Mexico. (Docket 2595).

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Boeing: 247-Ds

Beechcraft: Commercial Model 18s,

Military AT-11s, AT-7s

Sikorsky: S-43s

Jacobs: 300—285—245—225 h.p.

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Mexico, D. F.

## Republic Announces Seabee Price Increase

Republic Aviation Corp. has increased the flyaway-Farmingdale price of its four-place all-metal Seabee amphibian to \$8,000 and announced that this improved model, which henceforth will incorporate such former "deluxe extras" as controllable and reversible pitch propeller and complete cross country instrument panel, would supersede entirely the earlier "standard" model which the company originally planned to produce.

In notifications sent to the company's 70 Seabee distributors and 351 dealers, domestic and foreign, Republic listed three factors which made the new price mandatory at this time:

(1) Incorporation of more than 80 important engineering changes which have further improved the plane's quality, utility and performance, but all of which have cost money; and decision to comply with the thus far unanimous purchaser preference by including as standard equipment the full complement of features formerly listed as deluxe extras.

(2) Price increases, ranging up to and in some instances exceeding 50%, which Republic is paying both for materials, parts and equipment and for special heavy machine tooling.

(3) Cumulative "delay costs" which have resulted from prolonged delays in deliveries of production tooling and dies, thus necessitating that much production to date and for the immediate future be accomplished by hand methods or with temporary tools.

## Stinson Sets Voyager 150 Price at \$5,645, F.A.F.

Stinson Division of Consolidated Vultee Aircraft Corp. through W. H. Klenke, Jr., general sales manager, has announced the 1947 Voyager 150 will sell for \$5,645 and the flying station wagon will sell for \$5,745, F.A.F., Wayne, Mich.

A four place personal plane, the Voyager 150 cruises at 125 mph. It carries a payload of 1006 lbs., has a 150 hp engine and a range of 500 miles.

## Luscombe Reduces Silvaire Prices

A \$200 reduction in the prices of the two models of the all-metal Luscombe Silvaires, has been effected by Luscombe Airplane Corp., Dallas, Tex.

The 65 hp. model is now priced at \$2,995, flyaway factory, and the 85 hp. deluxe model at \$3,795, flyaway factory. L. H. P. Klotz, company president, attributed the price reduction to improved production efficiency.

## Friedlander Heads PAC

John W. Friedlander, president of Aeronca Aircraft Corp., on Nov. 21 was elected chairman of the Personal Aircraft Council, Aircraft Industries Association, succeeding William T. Piper, president of Piper Aircraft Corp.

Gordon C. Sleeper, personal sales manager of Republic Aviation Corp., was named vice chairman of the PAC.



**Northrop V.P.**—B. G. Read has been selected vice president in charge of manufacturing of Northrop Aircraft Inc. He was formerly factory manager of the Hawthorne aircraft plant now producing Flying Wing B-35 bombers, Reporter F-15 photo-reconnaissance planes, and the new three-engine transport, the Pioneer.

## Saturn Production May be Reinstated

The second prototype of the Lockheed Saturn is nearing completion and the Wright engines with which it will be equipped are expected during December. If the engines are received on time, the plane should be ready for its initial flight sometime after the first of the year.

Lockheed engineers anticipate that the new seven-cylinder 800 hp Wrights will prove satisfactory and on this theory it is expected production of the 14-passenger feeder line plane will be reinstated. It will be the fall of 1947, however, before the engines will be available in production quantities.

Robert Gross, president of Lockheed, who ordered suspension of the Saturn project because of the power plant difficulties encountered in the first prototype which was equipped with different type engines, said the plane would be tested thoroughly with the new engines and "then, if the project looks good, we will go forward with it."

## Announced by Curtiss New All-Cargo Plane

Plans to complete the prototype of a new four-engine cargo plane by early 1948 were disclosed at the National Aircraft Show in Cleveland last month by the Curtiss-Wright Corp.

Designed to carry 25,000 pounds 1,500 miles, or 20,000 pounds 2,500 miles without refueling, the craft, designated the CW-32, will be built by the C-W Airplane Division in its Columbus, O., plant. The plane will weigh 80,000 pounds fully loaded, and have maximum cruising speed of 270 mph at 25,000 feet.

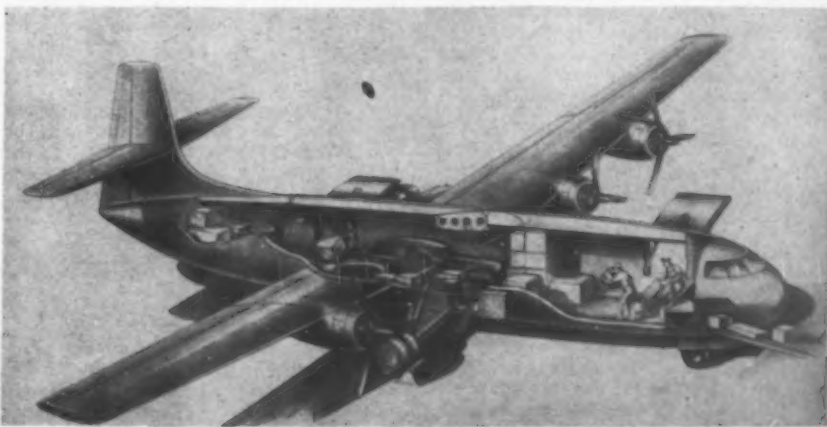
Direct operating cost is expected to be less than 5c per ton mile, making it competitive on a ton mile basis with fast ground transportation.

The CW-32 will be powered by R-1820 Wright Cyclone engines with exhaust driven turbo-superchargers, the same combination used in the B-17 Flying Fortress.

For ease of loading, the plane will have

a low floor equal to truck bed height—45 inches from the ground—made possible by the high wing type of design. Several doors will give access to the cargo space. It will have a total cargo volume of 4,000 cubic feet in one compartment, 50 feet long, nine feet wide, and from seven to nine high. An optional tail opening arrangement, whereby the entire aft-end of the fuselage may be raised, will permit full cross-section end loading of big articles such as automobiles, motor trucks, industrial machinery, or other items too bulky for loading through the side entrances.

Automatic temperature control through both heating and refrigerating equipment will permit hauling of all types of perishables and other items requiring constant temperatures. The pilots' cabin will be pressurized and special attention given to crew comfort for long flights.



This three-dimensional cutaway view shows loading possibilities of the proposed Curtiss-Wright cargo plane.



## American, United List Operations Profits for 1946 Third Quarter

### Transcontinental Air Carriers Show Effect of High Expenses

UNITED AIR LINES and American Airlines, have announced substantial profits for operations in the third quarter of 1946.

Net earnings of \$1,502,571, equivalent to 80c per share of outstanding common and management stock, were reported by United. This compares with \$1,508,155 or 92c per share for the comparable period of 1945.

United's operating revenues for the third quarter of '46 totaled \$20,272,534 as against \$10,892,510 a year ago. United finished the first nine months of 1946 with a net earning of \$2,343,631 or \$1.21 per share.

"Generally unsettled conditions characteristic of post-war world" adversely affected operating expenses, John W. Newey, v.p.-finance of UAL, told stockholders.

American showed a gain in net earnings in the third quarter over the first two quarters of this year with a gain of \$492,585 for the three months operations ended Sept. 30. The 1945 third quarter net profit was \$1,191,703.

A regular dividend on American's preferred stock was announced but the board of directors took no action on a dividend for common stock. C. R. Smith, chairman of the board, said the omission of the common dividend was attributed to 1947 equipment commitments and reduced revenues for this year.

Operating revenues for American for the first nine months of 1946 totaled \$47,521,316. Of this, passenger revenues, up 54% over the same period of 1945, contributed \$41,860,668.

### Dividends

Grumman Aircraft Engineering Corp. authorized dividend payment of 50c to common stockholders Nov. 29. This brings 1946 payments to \$2 compared with \$1.50 in 1945 when only one disbursement was made.

Directors of the Glenn L. Martin Co. have declared a quarterly dividend of 75c per share on common stock payable Dec. 20 to stockholders of record Dec. 10. This is the fourth quarterly dividend paid this year by the company, each of the others having been of the same amount.

Delta Air Lines has announced a semi-annual dividend of 25c per share payable Jan. 19, 1947, to stockholders as of Dec. 20, 1946. Delta's last semi-annual dividend, paid on June 10, was also 25c.

## Financial Comment

by  
I. W. Burnham, II  
of

Burnham & Company  
Members of New York Stock Exchange

It seems to us that the airlines would benefit considerably from better press relations. We all know that an airplane crash draws better space in our daily papers than fatal mishaps in competitive forms of transportation. It may be somewhat surprising but in 1945 the airlines flew approximately 38 million passenger miles for every fatality as compared with 24 million passenger miles for each fatality on the railroads of the country. We are not suggesting that news be withheld but are suggesting that news reports be more kindly disposed towards the airlines. This can be accomplished through better press relations. This idea has been running through our mind for many months during which unfavorable and critical articles have appeared in several of the leading nationally distributed magazines. But what particularly prompted these comments was an item in one of our local newspapers this morning describing the arrival of a DC-4 at LaGuardia Field. All of the preparations for a crash landing were described in detail as the plane put down on the runway without incident, even though one engine was dead and another, on the same side of the plane, misfiring. This may be news or, as it seems to us, it is ordinary everyday occurrence in the air transportation business. A good press relations job would see that the favorable rather than the discouraging aspects of the incident were emphasized.

The optimism generated by the private plane makers during the early months of this year have been gradually dissipated and it has been reported in recent months that new business has been declining and production has consequently been curtailed. Aside from all other reasons for the disappointing demand, one factor which stands out like a sore thumb is the price increases which have been effected in recent months. For example, the Republic "Seabee" has been advanced twice this year, from \$3,995 to \$4,550 and just recently to \$6,000. It is granted that operating costs have advanced, but demand, and consequently production, will never be stimulated by advancing the price, particularly to the extent to which the "Seabee" has been increased. As mass production markets stem from low prices, the hoped for volume in the small plane field will not come with advancing quotations.

### Wichita Hangar Up for Sale

The War Assets Administration is offering for sale or lease a \$338,550 hangar located on an 11-acre site 5 miles east of Wichita, Kan. With 42,240 sq. ft. of floor area, the building has concrete floors and foundation and galvanized iron walls.

## Washington Nat'l Net Profit Totals \$89,750

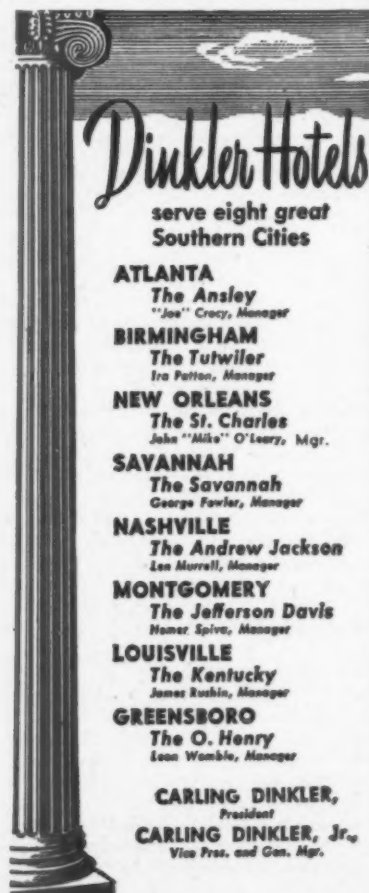
Washington National Airport has returned a net profit of \$89,752 for the fiscal year ended last June 30. This compares with a profit of \$52,495 for the previous fiscal period, and makes a favorable balance of \$111,632 from operation of the airport during the last five years.

Net expenditures, after transfer of \$43,260 between government agencies, totaled \$666,623 last year, 23% more than \$542,230 in fiscal 1945. Revenues, meanwhile, went up 27% from \$594,725 to \$756,375 (American Aviation, Nov. 15). A sum of \$730,535 had been appropriated by Congress for the 1946 fiscal period.

Expense items for the last fiscal year follow, with those for fiscal 1945 shown in parentheses: personnel services \$459,343 (\$369,943); fuel \$77,762 (\$81,541); utilities \$55,174 (\$47,975); supplies and materials \$49,606 (\$34,127); repairs and maintenance performed by outside agencies \$42,576 (\$42,303); equipment \$14,480 (\$5,623); communications \$10,475 (\$12,005); transportation of articles \$389 (\$177); travel \$78 (\$71).

### AIA Annual Meeting Dec. 5

The Aircraft Industries Association will hold its annual meeting Dec. 5 at 10 a.m. at the Wings Club, Hotel Biltmore, New York.



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## NEW YORK STOCK EXCHANGE

	1946		Range for 8 Days Ended 11/9/46		Range for 8 Days Ended 11/15/46		Two Weeks Not Change	
	High	Low	High	Low	High	Low		
<b>AIRLINES</b>								
Alaska Airlines	12	4 1/2	8	4 1/2	4 1/2	4 1/2	—	1/2
Continental Airlines	43	11 1/2	13 1/2	12 1/2	14 1/2	11 1/2	—	4
Northeast Airlines	21 1/2	8	21 1/2	8 1/2	9	8 1/2	—	1 1/2
Pan American Air. Wdr.	14	3 1/2	4 1/2	3 1/2	4 1/2	3 1/2	—	1/2
<b>MANUFACTURERS, ETC.</b>								
Aero Supply 'B'	7 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	—	1/2
Air Associates	23 1/2	11	12 1/2	12	12 1/2	12 1/2	—	1/2
Air Investors	8 1/2	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	—	1/2
Air Investors cv. pf.	38	37	37	37	37	37	—	1/2
Airon Mfg.	17 1/2	4 1/2	8 1/2	8 1/2	8 1/2	8 1/2	—	1/2
Airon Mfg. pf.	22 1/2	10	9 1/2	9 1/2	9 1/2	9 1/2	—	1/2
Bus Equip.	27 1/2	12	14 1/2	12 1/2	13 1/2	12 1/2	—	1 1/2
Callan Aircraft	9 1/2	3 1/2	4 1/2	4 1/2	4 1/2	4 1/2	—	1/2
Grease Corp.	31 1/2	15 1/2	18	16 1/2	17 1/2	17	—	1/2
Investor Aero.	9 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	—	1/2
Investor Aircraft	10 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	—	1/2
Fairchild C. & I.	17 1/2	9 1/2	11 1/2	10	10 1/2	9 1/2	—	1/2
Fairchild E. & A.	8 1/2	4 1/2	5 1/2	4 1/2	4 1/2	4 1/2	—	1/2
Irving Air Chute	13 1/2	10 1/2	10 1/2	10 1/2	10 1/2	10 1/2	—	1/2
Monaco Mfg.	8 1/2	3 1/2	4 1/2	3 1/2	3 1/2	3 1/2	—	1/2
Northern Aircraft	15 1/2	8 1/2	11	10	10 1/2	9 1/2	—	1 1/2
Piper Aircraft	15 1/2	6 1/2	7 1/2	6 1/2	6 1/2	6 1/2	—	1/2
Roosevelt Field	10 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	—	1/2
Spay Aero.	10 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	—	1/2
Solar Aircraft	20 1/2	12 1/2	15 1/2	14	14 1/2	13 1/2	—	1 1/2
United Aircraft Prod.	8	4 1/2	7 1/2	6 1/2	6 1/2	6 1/2	—	1/2
Waco Aircraft	9 1/2	3 1/2	4 1/2	4	4 1/2	4 1/2	—	1/2

## NEW YORK CURB EXCHANGE

<b>AIRLINES</b>								
American Airlines	19 1/2	9 1/2	12 1/2	10 1/2	11 1/2	9 1/2	—	1 1/2
Continental Airlines	34 1/2	14 1/2	18 1/2	15 1/2	16 1/2	14 1/2	—	2 1/2
Eastern Air Lines	31 1/2	19	23 1/2	21	21	19	—	3 1/2
National Airlines	24 1/2	15 1/2	19 1/2	16 1/2	17 1/2	15 1/2	—	2 1/2
Northeast Airlines	26 1/2	18 1/2	23 1/2	20 1/2	21 1/2	19 1/2	—	2 1/2
Pan American Airways	27	12 1/2	14 1/2	12 1/2	13 1/2	13	—	1 1/2
Pan-Central Air.	45 1/2	18 1/2	21	18 1/2	18 1/2	16 1/2	—	3 1/2
Trans. & Western Air	71	34	36 1/2	28 1/2	28 1/2	25 1/2	—	3 1/2
United Air Lines	24 1/2	12 1/2	15 1/2	13 1/2	14 1/2	12 1/2	—	4 1/2
Western Air Lines	38	12 1/2	15 1/2	13 1/2	14 1/2	12 1/2	—	3
<b>MANUFACTURERS, ETC.</b>								
Aviation Corp.	14 1/2	6 1/2	7 1/2	7	7 1/2	6 1/2	—	1/2
Aviation Corp. pf.	12 1/2	4 1/2	4 1/2	4 1/2	4 1/2	4 1/2	—	1/2
Bus Aircraft	30 1/2	12 1/2	14 1/2	13	13 1/2	12 1/2	—	1 1/2
Call Aircraft	25 1/2	10 1/2	11 1/2	10 1/2	10 1/2	10 1/2	—	1/2
Contax Aviation	88	28 1/2	33 1/2	30 1/2	31 1/2	30 1/2	—	1 1/2
Deing	10 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	—	1/2
Dea Vulme	10 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	—	1/2
Continental Motors	24	10	12 1/2	10 1/2	12	11 1/2	—	1 1/2
Curless-Wright	12 1/2	5 1/2	7 1/2	6 1/2	7 1/2	6 1/2	—	1/2
Curless-Wright "A"	24 1/2	17 1/2	20 1/2	19	20 1/2	19 1/2	—	1 1/2
Curless-Wright "B"	108 1/2	47 1/2	51	74	75	67 1/2	—	12
Grumman Aircraft	82 1/2	26	30 1/2	27 1/2	29 1/2	27 1/2	—	2 1/2
Lockheed Aircraft	45 1/2	20 1/2	25 1/2	22 1/2	24 1/2	21 1/2	—	1 1/2
Marlin, Glenn L.	45 1/2	21 1/2	24 1/2	20 1/2	20 1/2	18 1/2	—	1 1/2
National Aviation	25 1/2	15 1/2	17 1/2	16 1/2	16 1/2	15 1/2	—	2
North Am. Aviation	16 1/2	10 1/2	12	11 1/2	11 1/2	11	—	1
Republic Aviation	24 1/2	12 1/2	15 1/2	13 1/2	14 1/2	13 1/2	—	1 1/2
Servy Corp.	20 1/2	10 1/2	12 1/2	10 1/2	10 1/2	10 1/2	—	1 1/2
United Aircraft	37 1/2	18 1/2	20 1/2	18 1/2	19 1/2	18 1/2	—	1 1/2
Wright Aero.	106	80 1/2	86	85	83	84	—	1 1/2

## OVER-THE-COUNTER SECURITIES

	November 8, 1946		November 15, 1946	
	Bid	Asked	Bid	Asked
<b>AIRLINES</b>				
Airborne Cargo Lines	1 1/2	1 1/2	1 1/2	1 1/2
Air Cargo	1 1/2	1 1/2	1 1/2	1 1/2
All American Aviation	4 1/2	4 1/2	3 1/2	4 1/2
American Airlines, cv. pf.	73	74 1/2	64	68 1/2
American Overseas Airlines	10 1/2	11 1/2	10	10 1/2
Chicago & Southern Air Lines	10 1/2	10 1/2	9 1/2	9 1/2
Continental Air Lines	10 1/2	11 1/2	9 1/2	10 1/2
Delta Air Lines	27	29	24 1/2	26 1/2
Emery Air Freight Corp.	3	3 1/2	3 1/2	3 1/2
Express Aero	2	2 1/2	3 1/2	3 1/2
Flamingo Air Services, Inc.	1/2	3/4	3/4	3/4
Flying Freight, Inc.	1	1	1	1
Great Circle Airways, Inc.	1	1	1	1
Inland Airlines	1	1	1	1
International Airlines, Inc.	1	1	1	1
Island Air Ferries, Inc.	1	1	1	1
Latin American Airways, Inc.	1	1	1	1
Mid-Continent Air Lines	1	1	1	1
National Skyways Freight Corp.	1	1	1	1
Public Flyers, Inc.	1	1	1	1
TACA Airways	1	1	1	1
Trans Caribbean Air Cargo Corp.	1	1	1	1
U. S. Airlines, Inc.	1	1	1	1
<b>MANUFACTURERS, ETC.</b>				
Aeronautical Products	1	1	1	1
Aerona	1	1	1	1
Aircraft & Diesel	1	1	1	1
Airplane & Marine	1	1	1	1
Central Airports	1	1	1	1
Columbia Aircraft	1	1	1	1
Continental Aviation	1	1	1	1
General Aviation Equip.	1	1	1	1
Gladden Products	1	1	1	1
Globe Aircraft	1	1	1	1
Harlow Aircraft	1	1	1	1
Harvill Corp.	1	1	1	1
Interstate Aircraft & Eng.	1	1	1	1
Kalfe Aircraft	1	1	1	1
Lear, Inc.	1	1	1	1
Liberty Aircraft	1	1	1	1
Lucas Aircraft	1	1	1	1
McDonnell Aircraft Corp.	1	1	1	1
McDonnell Aircraft Corp. pf.	1	1	1	1
Pacific Airmotive	1	1	1	1
Pellak Mfg.	1	1	1	1
Standard-Thomson Corp.	1	1	1	1
Taylorcraft	1	1	1	1
Timm Aircraft	1	1	1	1

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# Operations and Maintenance Review

Including

COMMUNICATIONS—NEW EQUIPMENT—AIRPORTS

## Mutual Aviation Developing Fast Freight Handling System

### Martin 202 Loading Pattern Outlined by Cargo Company

A complete freight handling system, intended to bring about a major reduction in ground handling costs and delays with a relatively minor reduction in payload, has been developed by Mutual Aviation, Inc., Tonawanda, N. Y. An outline of the system, complete from special terminal buildings to marked floor areas in the Martin 2-0-2's which the company has ordered, has been included as an exhibit in Mutual's application to CAB for an air freight certificate.

In addition to anticipating more efficient handling of air cargo, Mutual hopes to get away from the prevailing tendency of air freight operators to deal only in plane-load shipments, and to offer shippers full plane service with package lots of cargo.

To begin with, Mutual has designed a complete freight terminal building for each of the cities it proposes to serve (Buffalo, New York, Chicago, Boston, Detroit, Cleveland, Pittsburgh, Philadelphia, Indianapolis and St. Louis). The terminal building is intended to be located completely away from airport passenger terminal facilities, with separate access roads where possible.

As outlined in the sketch below, outbound freight comes to the terminal at the truck dock, is placed on a portable, flat belt conveyor, and moves direct to the weighing station where each package is weighed and marked as to destination. A running load manifest is kept by the weight clerk to provide at all times an accurate picture of the loads for any particular flight. This up-to-the-minute manifest is necessary not only for the originating station but

for teletype space control over the entire air freight network.

After weighing and manifesting, packages move along another short length of conveyor to a sorting table from which they are placed in specially designed pallet-type cargo containers, each container being marked for a particular destination. These pallets are an essential component of the system and are light weight, semi-live, skid-type units 36 inches wide, 48 inches long and 48 inches high. Canvas sides are laced to a metal frame, and each container has a canvas top which can be laced down to hold contents securely in place. In order not to exceed manufacturer's designated airplane floor loadings, the skid structure has a properly balanced wheel contact and fixed support area.

After being loaded at the sorting table, containers are moved to an assembly area. This space is a full-scale floor plan layout of the cargo plane interior, identical in length and width with the plane on which the cargo is to be carried. Parked lengthwise on the layout will be four fifth-wheel type trailers with six by twelve foot platforms, each capable of holding six of the loaded pallets. Arranged in advance on the floor layout according to both weight and destination, the entire load can then be moved to the plane and placed aboard for proper center of gravity and for quick unloading at route stops.

The entire weighing, sorting and assembling operation can be completed without reference to the actual airplane and well ahead of departure time.

Containers are moved into their assigned positions by means of light skid jacks. After the entire load is

placed, containers are fastened against shifting with tie-downs.

Unloading of incoming air freight follows the reverse of this pattern and utilizes the same crews. Containers are skidded to the plane door, set down on waiting trailers by the fork-lift, and towed in a train to the terminal to be sorted for distribution.

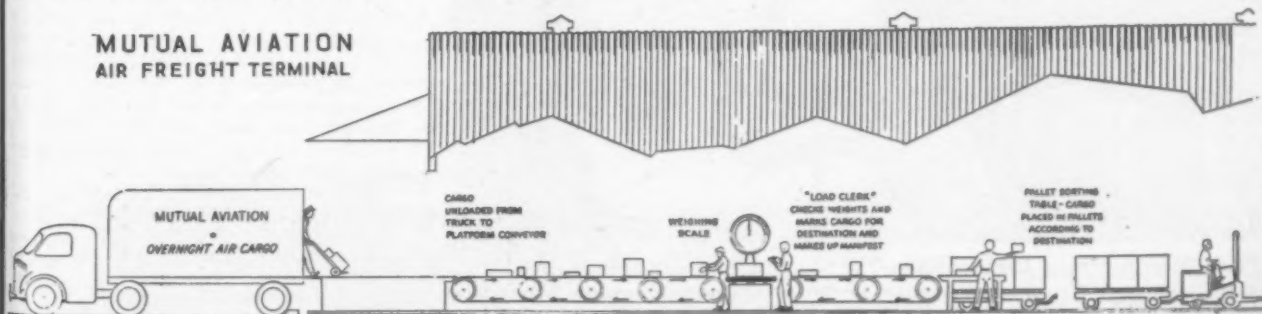
Mutual expects to further reduce handling time and cost by making empty containers available to shippers for pre-loading at the shippers warehouse rather than at the air freight terminal. Since containers loaded in this manner can also be delivered direct to consignee without terminal handling of each item in the container, the carrier will be able to offer shippers a substantial discount for preloading. Also, shippers will be able to save in many instances by loading containers without separate packaging of each item.

The Mutual system in its complete form is intended primarily for stations at which flights originate and terminate. At intermediate stops the method will be scaled down in equipment and personnel according to the average amount of space allocated.

In its scientific approach to the entire problem of air freight handling, Mutual has computed that loading the Martin 2-0-2 with advance prepared cargo pallets will mean a payload loss of approximately a thousand pounds per plane, plus a loss with certain low density cargo of available cargo space. It is estimated, however, that such loss can be more than made up through savings in airplane ground time, cargo handling time before and after flights, labor and other economies possible with the system. A further consideration is that operations are not planned for more than an 80% load factor to insure steady and convenient service.

Joseph L. Homesberger, president of Mutual Aviation, Inc., states that terminal space has been leased at the Buffalo, N. Y. airport preparatory to running extensive proving operations between New York and Buffalo.

### MUTUAL AVIATION AIR FREIGHT TERMINAL



## United Aircraft Official Says Use of Jets In Commercial Craft At Least Five Years Off

A lapse of at least five years before turbine power plants come into commercial airline use was predicted during the National Aircraft show by Leonard S. Hobbs, v.p.-engineering for United Aircraft Corp. Hobbs said that a second five year period probably would pass before piston engines began to move out of the picture.

Agreeing with other experts that existing transport planes cannot be modified for turbine power, Hobbs said it would take "at least four years" from the present to design and build a passenger plane capable of making efficient use of turbine power.

This, he said, would be true even if suitable jet or propeller turbines were now available. He remarked that although the prop-jet engine is generally assumed to be the answer for transport operations, no such engine is "even close to being ready."

Hobbs stressed that researchers are still relatively ignorant of the effects of 500 mph speeds on passengers and equipment, and that a lot of flying must be done in the 400 mph range, where piston engines are perhaps more efficient than jets, before moving to higher speeds. In this connection, he pointed out that jet fighters, and even today's relatively high speed transports, have to be slowed down in any sort of turbulent air to well below their rated cruising speed.

In addition to the human factor and the problems of new aerodynamic de-

sign for higher speeds, it was emphasized that despite phenomenal progress with turbine power plants there is much more to be done before they can be considered practical for commercial application. Among the major problems, he cited the need for metals more suitable for intense heat, the high cost of machining each of the hundreds of rotors in a jet engine, high fuel consumption which makes the jet impractical for commercial flying, and the fact that simplicity of maintenance is more than offset by having to replace engines, in military service, as often as airlines engines are given routine checks.

Hobbs expressed a belief that despite any lead the British may hold over U. S. in jet manufacturers, at the present time, that country will not have a satisfactory turbine powered transport any sooner than the American industry. He said that U. S. manufacturers would overcome in five years, any British lead over U. S. turbine developments.

His company, Hobbs said, is now spending ten times as much on engine research as at any time before the war, much of it on turbines but enough on reciprocating engines that the airlines "can expect still further refinement in the piston engine before it becomes obsolete." He listed the compounding of exhaust power as the principal development yet to come in reciprocating engines.

## Terminals, Transports And Flying Schedules Topics At SAE Meeting

Maintaining all-weather and transoceanic flying schedules, engineering requirements for future transport aircraft, and development of modern air terminals are among the main items to be discussed at the SAE Air Transport Engineering meeting being held at the Edgewater Beach Hotel in Chicago, December 2-4.

"This meeting will afford a preview of probable engineering developments in air transportation within the next several years," according to general manager John A. C. Warner of the Society for Automotive Engineers. Here engineers best qualified to know, and responsible for the conversion of ideas into actual operations, will be considering helicopters, new air terminal equipment, transoceanic flying and maintenance, jet engines, all-weather schedules, and other pertinent subjects. The SAE Chicago section will assist in sponsoring the meeting. General chairman is W. W. Davies of United Air Lines.

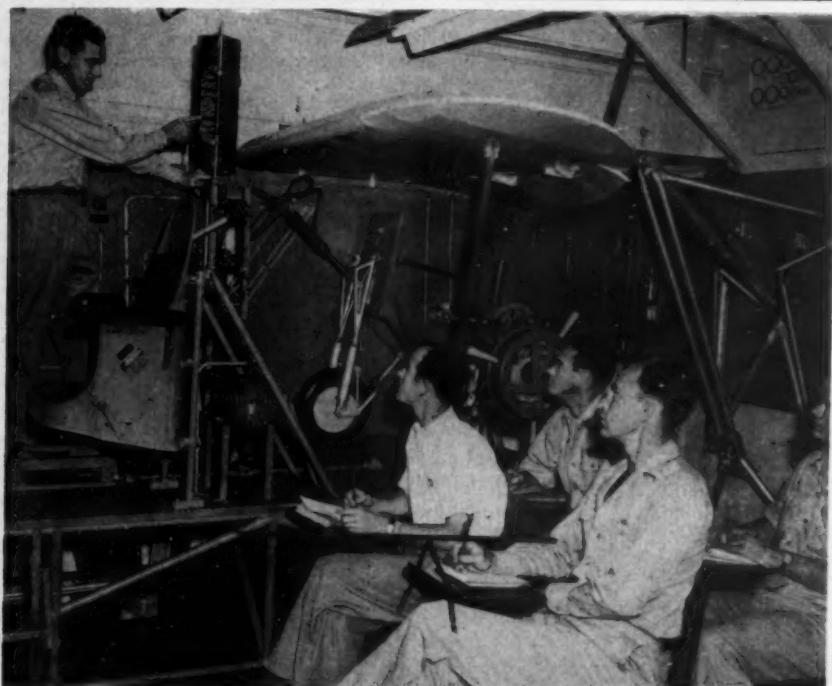
Chairman of various sessions on the three day program are C. E. Swanson, Northwest Airlines; J. A. Borger, Pan American Airways; E. H. Sittner, TWA, Inc.; W. C. Mentzer, United Air Lines; Harold Hoekstra, Civil Aeronautics Administration; and A. L. Morse, C.A.A. Experimental Center. T. P. Wright, Administrator of Civil Aeronautics, will be toastmaster at a banquet to be held in conjunction with the meeting.

## Army Awards GE Contract For New Airborne Radar

The electronic department of General Electric Co. has been awarded an Army Air Materiel Command contract for development of a small simplified radar to weigh about 100 pounds. Intended as an improvement over the 151 pound, five control APS-10 equipment developed late in the war, the new radar will be applicable to commercial airline use as well as military operations.

A principal feature of the new airborne radar set will be a gyroscopically stabilized antenna to permit maneuvering a plane without affecting the radar picture. Inability to maintain a uniform scope view when in other than a straight and level attitude is felt to be one of the chief limitations of equipment now available.

Other improvements called for in the G.E. development contract are extension of the 90 mile range of the APS-10 set, power increase to eight times that of the APS-10, and provision for simplified maintenance.



**PAA Maintenance Classroom**—Mechanics and other employees attending Pan American Airways' maintenance training school in Miami get part of their instruction in this room which contains a complete hydraulic system mock-up for landing gear, brakes, cowl flaps and windshields. Correct hydraulic fluid level is shown by instructor Lester Peru.

## New Equipment

### Attack Angle Indicator

This new Kollsman instrument provides positive stall warning and at the same time indicates the most efficient flying angle for fuel conservation. Angle of attack indicator at left has a red reference marker to show approach to stalling point, and a green marker to permit trimming for efficient level flight. The freely moving vane pictured below the dial is mounted on the airplane nose and



is electrically connected to the dial pointer.

The instrument is expected not only to make all types of flying simpler and safer, but to aid in transition from slow to faster planes by pilots lacking the feel of a plane under instrument conditions or on landing approaches in turbulent air.

### Tow Bar For Ercoupe

One-man handling of Ercoupes is possible with this welded steel tow bar. The offset end fits snugly into the axle of the nose wheel and permits



pushing, pulling or turning of the plane without danger of damaging plane skin or control surfaces. List price at any Air Associates warehouse is \$9.90, less trade discount.

### Spun Glass Cord

United Air Lines is using spun glass cord for lacing the wiring harness of two-way radio communications equipment in all planes. Heat and humidity are reported to have less influence than on linen cord formerly used.

This advertisement represents an exceptional opportunity to the man who wishes an unlimited, yet secure future in aviation with a successful... growing... established company.

## Wanted MANAGEMENT & SALES EXECUTIVES

Our company, already the largest as well as the oldest in its field, is expanding on a national scale... As a result, we need personnel for key positions that have just newly opened. Some of these positions require aviation experience... some do not.

**IN OUR EXECUTIVE OFFICES**, near Los Angeles, we need additional top-calibre staff men — for administrative, executive assistant, and sales work. These are responsible positions... and we need and want responsible men to fill them.

**OUR MAJOR BASES** now reach from Alaska to Mexico. For new bases to be established, we need men qualified to assume the full responsibilities of branch manager.

*Please write us in detail about yourself and your experience. If you have had aircraft, aircraft-supply, or automotive experience, so much the better. Address your letter to Dept. AA*



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Railroad Motor Cars and Standpipes • Farm Equipment



## Gander Passenger Facilities Improved With Modern Terminal



A new commercial airline terminal comparable to passenger service facilities in the U. S. and Europe has been erected at Gander Airport, Newfoundland.

The airport which was built and used during the war as an interim point for trans-Atlantic warplane flights had only the crudest kind of passenger accommodations when the war ended and commercial lines began to use it for international flights.

In remedial action, the participating airlines jointly sponsored the building of

the "Skyways Club", name for the terminal which includes hotel accommodations, restaurant, comfortable lounge and cocktail bar. James M. Eaton, American Overseas Airlines vice president, served as chairman of the committee which engineered the project.

Pictures in the montage above show some of the highlights of the new passenger facility.

The upper left picture shows the "Big Dipper" bar and snack service headquarters which is located at one end of the 200-foot waiting lounge. At the op-

posite end, (upper center) are the flags of all the nations which have airlines operating into Gander.

Opposite the terminal building (upper right) the "North Star" restaurant and "Little Dipper" cocktail bar (lower left) hold forth.

A large sign at the entrance to the lounge (lower center) leaves little doubt as to the location. Hotel accommodations are as adequate in the one-story boarded building (lower right) as facilities in any metropolis.

## Approach Light Tests Planned for Newark Field in Near Future

Two distinct approach light systems are to be installed in the near future at Newark Airport. A part of a joint effort among the scheduled airlines to determine the most suitable method of lighting final approach areas in connection with instrument landing radio aids, the \$80,000 Newark project is expected to be in operation by January 1.

The tests, supplementing similar experiments at the Landing Aids Experiment Station, Arcata, Calif., will be supervised by a committee representing the Civil Aeronautics Administration, Air Transport Association and the Air Line Pilots Association. This group will set up test procedures and will evaluate the two systems to be tried.

Equipment to be tested is a system developed for the Army Air Forces by American Gas Accumulator Co., and a combination of neon tubes and bright flashing lights produced by Sylvania Electric Products Co. The American Gas Accumulator system uses 30 lights, each of 5,000 watts rating, re-

quiring 150 kilowatts. The light fixture produces a red beam of about 20,000 candlepower designed to be visible from any normal approach angle.

Sylvania's equipment uses a combination of 48 neon lights and 24 bright flashing lights. Four tubes are used in the neon unit rather than the single tube in the present C.A.A. approach light. The condenser discharge type flashing lights show an intense light of short duration, each flash running from the far end of the approach toward the runway.

In announcing the Newark tests, the A.T.A. stated they were necessary as part of an overall program because "no approach light system tested thus far has proven entirely satisfactory." Reasons given for non-acceptance of many proposed systems have been, first, that a light of sufficient intensity to penetrate a heavy fog for any worthwhile distance is apt to produce a pilot-blinding glare at certain approach angles and, second, because a pilot coming in to one side of the runway cannot always see both lines of approach lights and cannot always determine instantly whether he is to the right or left of the runway.

## NAA Gives 17 Northeastern Airports New Safety Awards

As the first of a series of awards to airports for high standards of safety and service, the National Aeronautic Association has awarded certificates of Good Operating Practices to 17 airports in the northeastern section of the U. S. The awards were made by the advisory council of the N.A.A. Air Safety Division.

Certificates in the initial group of awards went to Brainard Field, Hartford, Conn.; Rentschler Airport, East Hartford, Conn.; Municipal Airport, Portland, Maine; Hylan Airport, Henrietta, N. Y.; Plainfield Airport, Plainfield, Conn.; Bridgeport Airport, Bridgeport, Conn.; Auburn-Lewiston Airport, Auburn, Maine; Aviation Country Club, Hicksville, Long Island, N. Y.; Chemung Country Airport, Horseheads, N. Y.; Lake Susquehanna Airport, Blainstown, N. J.; Country Club Airport, Clarence, N. Y.; Seneca Falls (N. Y.) Airport; Springfield (N. Y.) Airport; Rochester (N. Y.) Airport; Martins Creek Airport, Belvidere, N. J.; Amsterdam Flying Service, Amsterdam, N. Y., and Buffalo Airport, Gardenville, N. Y.

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# Equipment Previewed at National Air Show

**THE BEETLE SYSTEM** of three-way manual control for aircraft is being offered to the market by Dayton Aircraft Products Sales, Inc., Dayton 1, Ohio. It independently centers ailerons, elevators and rudders in the wheel, and is said to offer weight and cost saving as well as simplification of controls. Installation is possible either in new planes or in present types.

**A CABIN PRESSURE** control unit for the Douglas DC-6 was displayed at the show by Kollsman Instrument Division of the Square D Co. Cockpit panel for the unit includes, in addition to an indicator dial for the automatic cabin pressure regulator mechanism, a cabin differential pressure indicator, altimeter, two supercharger air flow rate dials, vertical speed indicator, and a cabin pressure change limit selector.

**WIRE FOR TIRES** has been perfected by the United States Rubber Co. for smaller tires of greater strength and load capacity. A fine, flexible steel wire cord is used to obtain a strong carcass. On display at the show was an experimental 6-ply 15.50-20 tire designed for loads of 20 tons, or twice the load carried by present tires of the same size. It weighs 230 pounds.

**FIVE PARACHUTE FLARES** and an International 37 mm. flare pistol make up a compact emergency kit being developed by the Kilgore Mfg. Co. The kit probably will sell for around \$150. International Glare Signal also is developing a day-night emergency tube which will fire night flares from one end and emit a cloud of brilliant orange smoke from the other end as a daylight rescue signal.

**AIRCRAFT POWER CARTS**, models 25D28-2 and 24D28-2, were shown by the Homelite Corp., Port Chester, N. Y. The first is a three wheel unit weighing 445 pounds and providing 5,000 watts (175 amps), 28.5 volts direct current. For engine starting and other brief loads additional amperage is obtainable. Power is provided by a two-cylinder air cooled gasoline engine. Accessories include two CO-2 (2½ lb.) fire extinguishers, two 12-volt aircraft type batteries in series, and a 10 foot plug-in cable with connections. Model 24D28-2 is a two-wheel dolly unit with a single cylinder air cooled engine. Rating is 2500 watts (90 amps), 28.5 volts direct current. It can be used either with one or two batteries for output up to 394 amps.

**THE AIRPORT LIGHTING** field is being entered by Grimes Manufacturing Co., aircraft lighting pioneers, with a set of equipment and installation service for small private airports. Grimes has designated a mold to be used by the field operator in making flush market bases, an inexpensive pedestal marker with a plastic break-off clamp, and a transformer arrangement which will cut 230 volts down to 12 and permit the operator to light his field for about 50c a night. Grimes will provide the wiring installation with a special ditching machine developed for deep but narrow cable trenches.

**ANOTHER GRIMES** development, in another field, is a transparent tape to be stuck on a chart to mark a course and give mileage readings going and coming between any two points. Mileage is scaled for sectional charts on one style of tape and for world charts on another. A roll of the tape will cover about 2,000 miles of sectional chart and 4,000 miles on world charts.

**THE NAVY** gave a night demonstration during the show of a new landing light which can be controlled to sweep vertically and horizontally. It is expected to be manufactured commercially in the near future.

**THE "WINDIAL"** anemometer and wind vane, with indoor indicator panel, has been placed on the market by Friez Instrument Division of Bendix Aviation Corp. Considerably more modern looking than most wind instruments, the indicator assembly has two matched four-inch dials, with indirectly illuminated pointers, in a finished metal case. Indicator case contains transformer and rectifier, and the unit may either be plugged into a 115 volt, 60 cycle, A. C. circuit or used with 10-18 volt. D. C. batteries. Complete unit includes mounting support for transmitter vane-propeller and 50 feet of No 20, 8 conductor wire.

**UNDER-WING FUELING** fittings were demonstrated at the show by The Parker Appliance Co. Scheduled for installation in several newtype transports, the equipment includes a valve assembly which is built into the wing and tank, and a quick-attaching hose connection which will have to be fixed to a fueling hose at all airports servicing the new planes. A halfturn on two hand grips is all that is necessary to connect the hose fitting and the under-wing valve. Normal hose pressure fills the tanks at the same rate as conventional fueling.

**RADIO AIDS** to aircraft navigation, in four different units, were displayed for the first time by the aviation section of the RCA Engineering Products Division. The units were an airline type automatic direction finder (AVR-21), a general purpose aircraft communications receiver (AVR-22), a navigational and communications VHF receiver (AVR-25), and a personal plane VHF transmitter (AVT-114). The first three are constructed to fit into half of the standard aircraft rack space and weigh considerably less than conventional equipment. The transmitter is designed for mounting in the standard 3-inch instrument panel opening.

**DEODORANT-DISINFECTANT** liquid for airliner lavatory commodes has been added to the R. M. Hollingshead line of maintenance and service items. It has no pronounced odor of its own, and can be poured in small quantities directly into the commode or sprayed by atomizer in the airplane cabin. Hollingshead, also is showing a new preservative dressing for wing walks.

**OIL COOLERS** made of aluminum rather than copper were displayed at Cleveland by Clifford Mfg. Co., Waltham, Mass. The company has provided coolers of this type for Chicago & Southern's DC-4's and has orders for installations on several new type planes. The honeycomb construction is compact and extremely light.

**SIX GYRO INSTRUMENTS** were shown for the first time by Sperry Gyroscope Co., Inc. All have been designed for a standard 3 3/16 inch panel cut-out mounting. Two are electric operated gyrosyn compasses, models C-2 and C-2A; one is a directional gyro, model G-3, to be used as a small plane companion to the F-3 air driven attitude gyro; one is a new non-tumbling gyro horizon, electrically driven, which provides unlimited indication in bank and up to 27 degrees indication in climb or glide. It is designated model H-3. The remaining two instruments are the F-4 and F-4A attitude gyros for pilots who prefer pattern indication.

**A. HIGH FREQUENCY** capacitor discharge ignition system is a new American Bosch Corp. design. It is used with American Bosch single gearless half speed low tension magnetos. Principal advantages are better fouling conditions and improved spark plug life.



## 30 Hour Check

By DAVID SHAW

Just lately we have heard from quite a number of pilots, and a few mechs, radiomen, etc., who seem to be giving serious thought to going to work for foreign airlines. This inclination to give up a good thing at home in the hope of finding something better abroad seems to result in part from the normal belief that faraway places are more interesting, but it results to a greater degree from an apparently prevalent belief that U. S. airlines are in a rather shaky position just now.

We'd like to do whatever we can to scotch this belief. It may be quite true that employee morale has hit a low point, and it certainly is true that prevailing morale has an influence on a fellow's feeling about the security of his job. Nevertheless, the fact that a number of domestic airlines are having organizational trouble at the moment does not mean that air transportation is an unsound business or that any company in the business is in an unsound long-range position. In undertaking to expand at a rate for which no company could have been altogether prepared, it was natural that management should have been unable to keep the whole house in order. The rapid expansion moves were necessary, and now the levelling-off moves are just as necessary.

In a business where seniority counts for as much as it does in air transportation, it seems unwise for anyone to hurriedly make a permanent change in his own situation on account of a company situation which is purely temporary. Some of these foreign air carriers can offer a very attractive proposition, and in a few cases it might prove just as attractive as it sounds. It might even hold up for quite a few years, but even the best foreign proposition won't last forever. About the only people we've talked to on this subject who seem reasonably justified in such a move are senior pilots who figure to give up flying in a few years anyway. If they want to leave their present berths for some-

## Trans-Canada Installing Huge 'Drydocks' for Overhaul Use

Huge "drydocks" for servicing the new Rolls Royce powered DC-4M have been designed by Trans-Canada Air Lines' engineers and will be installed at Winnipeg, Dorval and Vancouver airports.

Function of the servicing dock is to simplify Trans-Canada's "unit overhaul" servicing procedure. Planes requiring replacement of any major component will be placed in the dock, worn parts removed, and new ones installed in minimum time. Even wings and fuselage sections can be set in place without delay.

Similar to other servicing docks used on 4-engine transports, the Trans-Canada development has been designed to meet the company's own requirements and to permit installation in existing hangar accommodations. It consists of a main wing and engine work platform fixed permanently to the floor, movable side and tail stands, and a unique overhead monorail catwalk. Side stands and the catwalk are moved out of the way while the plane is wheeled into position nose first, and are then moved back into position for uninterrupted work.

Trans-Canada has completed blueprints for the dock and expects to contract for outside construction as soon as materials are available.

## Boeing Loading Time Good

Passenger loading and unloading tests conducted by Boeing Aircraft Co. have shown that the Boeing Strato-cruiser, with its midway entrance, can be loaded or unloaded in no more time than 4-engine transports carrying only half as many passengers. By having 80 to 114 people enter and leave the ship with typical loads of baggage and coats, it was demonstrated that the plane could be filled or emptied inside three minutes.

thing outside the country, it's quite all right with us. We like to see those younger fellows get a chance to move over to the left side of the cockpit.

## Operations—Maintenance Personnel

Capt. Frank J. Haas is now chief navigator for Northwest Airlines, in charge of an extensive flight training program for the start of the company's Orient routes.

Capt. Carl Bach, former chief pilot for Colonial Airways, has been promoted to director of flight operations.

Capt. Lewis C. Lindsey, previously chief pilot of the Alaskan sector for Pan American Airways, has become chief pilot of the line's Latin American division.



Hoare

Larson

Miller

W. F. Hoare has been appointed director of maintenance for United Air Lines.

O. T. Larson is now direct assistant to United Air Lines' vice-president of Operations, J. A. Herlihy.

Thomas M. Miller, formerly director of economic research for Chicago & Southern Air Lines, is now director of properties for the company.

Fred Bolduan, with Northwest Airlines since 1942, is now supervisor of flight radio officers for the Orient region.

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